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NEW JERSEY MEDICINE

THE JOURNAL OF THE MEDICAL SOCIETY OF NEW JERSEY JANUARY 1990

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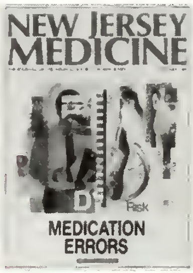

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Cover: Will Harmuth

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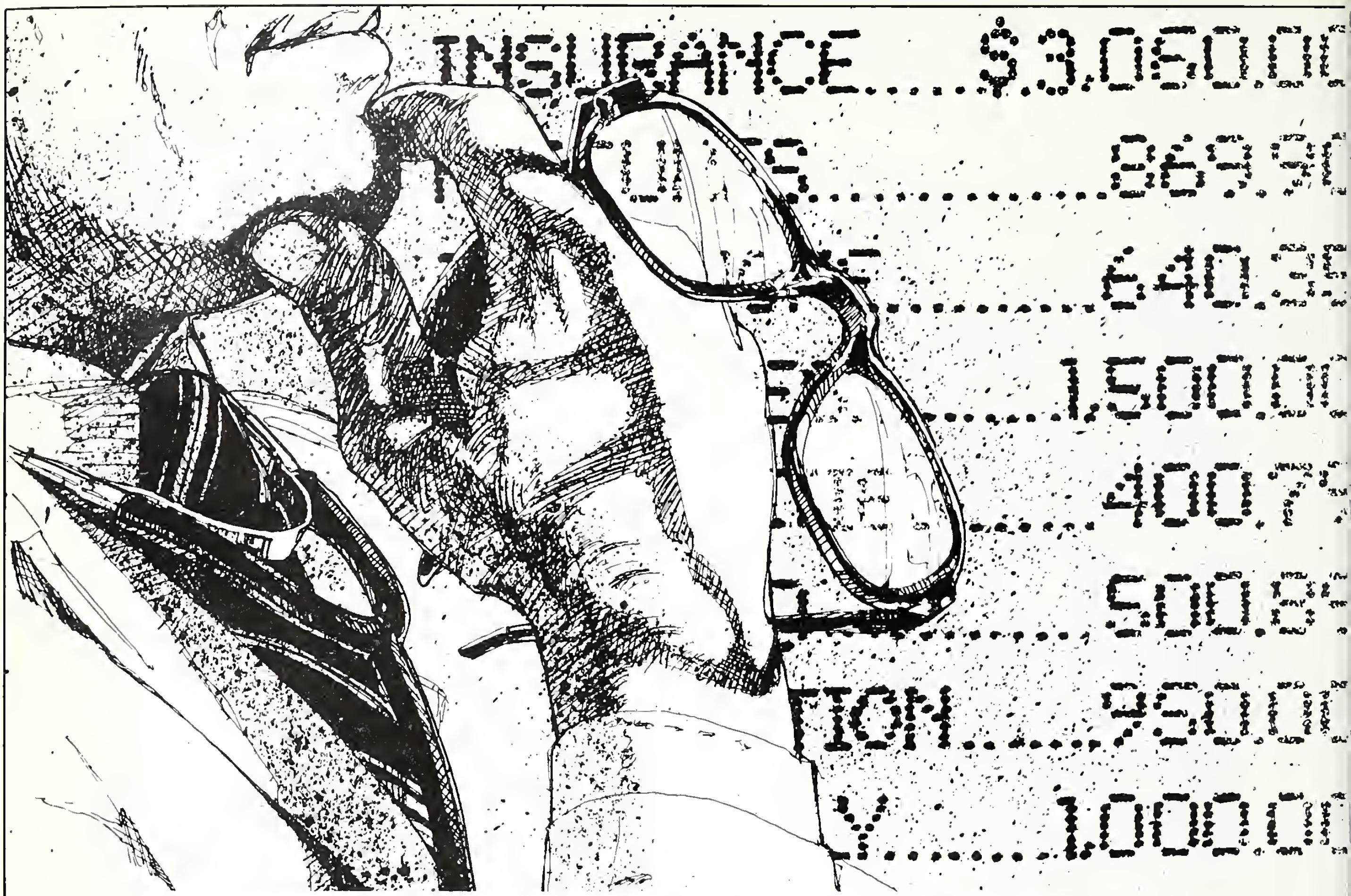

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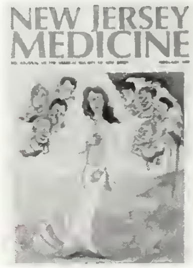

The Cover: Sexual harassment and discrimination are pervasive problems with serious consequences to physical and mental health. Our report begins on page 105. Cover: Frank Cecala

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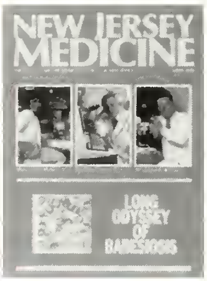

We present the detectives who uncovered the clinical and epidemiological features of human babesiosis. The story begins on page 291.
Photography: Stan Godlewski

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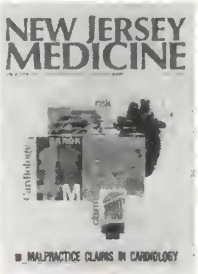

To decrease patient injury and lower the incidence of malpractice suits, MIIENJ analyzed data from its files. The story begins on page 393.
Cover: Will Harmuth

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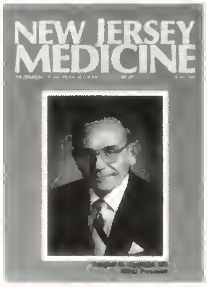

Douglas M. Costabile, MD, is the 198th president of the Medical Society of New Jersey.

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Highlights from a two-day symposium on Lyme disease are presented in this special issue, to help readers explore the disease.
Cover: Frank Cecala

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James MacKenzie, MD

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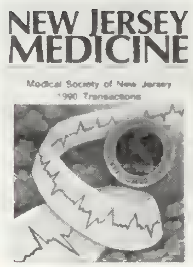

We present the reports and the actions of the 1990 Medical Society of New Jersey Annual Meeting. Cover: Jean Hough

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715 Intussusception in Childhood
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Our report on pediatric cancer mortality rates for the 25-year study period begins on page 703. Cover: Will Harmuth

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- We provide crossover billing to Medicaid from Medicare.
- We follow up patient billing to the point of precollection. Accounts turned over to collection are managed by Prime Mark at no cost. (Client pays only collection agency percentage for amounts recovered.)

CREDIT AND COLLECTIONS

Prime Mark Corporation provides a complete range of collections services, individually tailored to the needs of our clients. We have a proven track record in successfully resolving delinquent accounts while maintaining the highest levels of professionalism.

Our automated collection system produces a complete selection of management reports which enable clients to monitor our performance on a monthly basis.

- Acknowledgements — all new accounts
- Monthly remittance reports
- Trial balances of open accounts
- Deletion reports

Prime Mark is a member of Healthcare Financial Association, New Jersey Patient Accounts Managers Association, and the New Jersey Hospital Association.

Prime Mark is incorporated in the state of New Jersey as a collection agency.

*To find out more about how Prime Mark can improve your billing and/or bad debt collections call **Joseph W. Delaney at 201-669-8987.***

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Cover: Frank Cecala

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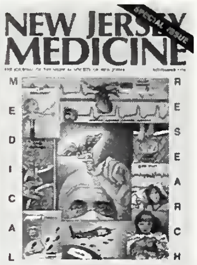

This special issue focuses attention on medical research in New Jersey, and the far-reaching effects of such progress.
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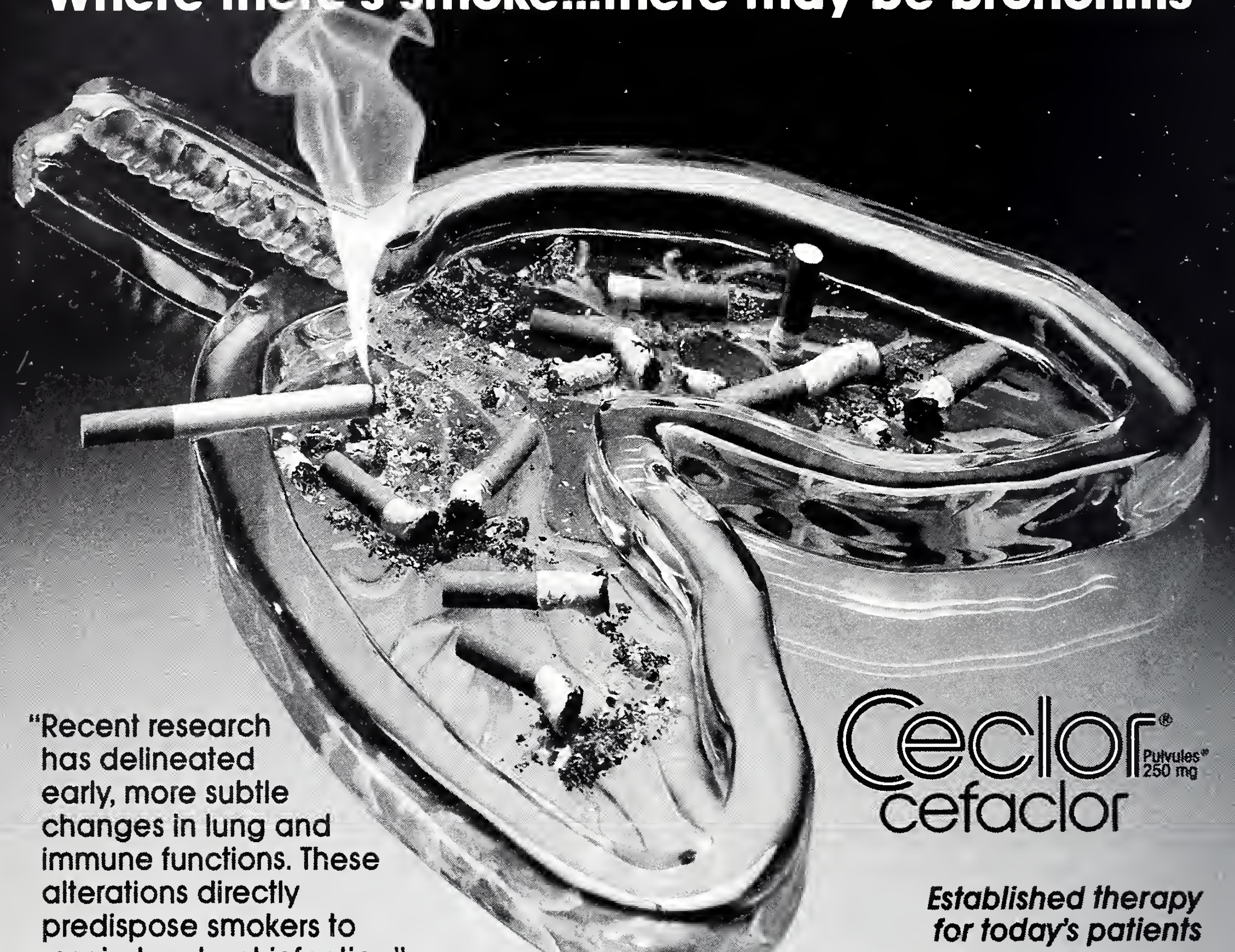
Where there's smoke...there may be bronchitis



"Recent research has delineated early, more subtle changes in lung and immune functions. These alterations directly predispose smokers to respiratory tract infection."

Am Fam Phys 1987;36:133-140

Ceclor® Pulvules® 250 mg
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Established therapy for today's patients

For respiratory tract infections due to susceptible strains of indicated organisms

Brief Summary.
Consult the package literature for prescribing information.
Indication: Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A β-hemolytic streptococci).
Contraindication: Known allergy to cephalosporins.
Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Hypersensitivity reactions have been reported in about 1.5% of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of **serum-sickness-like** reactions have been reported with the use of Ceclor. These are characterized by findings of erythema multiforme, rashes, and other skin manifestations accompanied by arthritis/arthralgia, with or without fever, and differ from classic serum sickness in that there is infrequently associated lymphadenopathy and proteinuria, no circulating immune complexes, and no evidence to date of sequelae of the reaction. While further investigation is ongoing, **serum-sickness-like** reactions appear to be due to hypersensitivity and more often occur during or following a second (or subsequent) course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults with an overall occurrence ranging from 1 in 200 (0.5%) in one focused trial to 2 in 8,346 (0.024%) in overall clinical trials (with an incidence in children in clinical trials of 0.055%) to 1 in 38,000 (0.003%) in spontaneous event reports. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy; occasionally these reactions have resulted in hospitalization, usually of short duration (median hospitalization = two to three days, based on postmarketing surveillance studies). In those requiring hospitalization, the symptoms have ranged from mild to severe at the time of admission with more of the severe reactions occurring in children. Antihistamines and glucocorticoids appear to enhance resolution of the signs and symptoms. No serious sequelae have been reported.
- Stevens-Johnson syndrome, toxic epidermal necrolysis, and anaphylaxis have been reported rarely. Anaphylaxis may be more common in patients with a history of penicillin allergy.
- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1% and, rarely, thrombocytopenia and reversible interstitial nephritis.

Abnormalities in laboratory results of uncertain etiology.

- Slight elevations in hepatic enzymes.
- Transient lymphocytosis, leukopenia, and, rarely, hemolytic anemia and reversible neutropenia.
- Rare reports of increased prothrombin time with or without clinical bleeding in patients receiving Ceclor and Coumadin concomitantly.
- Abnormal urinalysis; elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest® tablets but not with Tes-Tape® (glucose enzymatic test strip, Lilly).

PA 8791 AMP [021490LRI]

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

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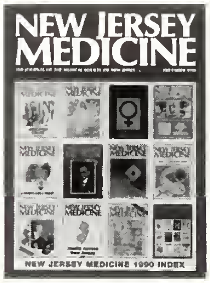

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NEW JERSEY MEDICINE

would like to thank all our
readers and advertisers
for a successful 1990.

Warm Wishes for a
Joyous Holiday Season
and a
Healthy and
Happy New Year!

NEWSWATCH

MERIN ADOPTS MALPRACTICE SURCHARGE

In an effort to address a $65 million deficit and to cover-up ineffective regulatory action and negligent management, Insurance Commissioner Kenneth Merin announced the adoption of his ill-advised medical malpractice surcharge proposal.

The Medical Society of New Jersey (MSNJ) and the Medical Inter-Insurance Exchange of New Jersey (MIIENJ) have filed suits in the appellate division of the Superior Court contesting Merin's decision. Another MSNJ suit to require Merin to proceed against the Property-Liability Guaranty Association has been appealed to the appellate division and will be consolidated with the other suits.

Neither the New Jersey Hospital Association nor the Princeton Insurance Company is objecting to the surcharge.

MSNJ believes this protracted and bitter litigation ultimately will be decided by the State Supreme Court.

MEDICAL WASTE BILL AWAITS ACTION BY GOVERNOR

A new medical waste bill has been passed by both the Assembly and the Senate. It provides for a much lower fee schedule. Generators with under 50 pounds per year would pay $100. Further, under its regulation, the Department of Environmental Protection is required to make refunds of fees collected which exceed that amount.

MEDICAL LICENSING REFORM

S-2936 has passed both the Senate and the Assembly and awaits the governor's signature. This bill reforms the medical licensing and discipline system in New Jersey. It assures patients that physicians with impairments are not a risk to the public health while providing an unbiased and fundamentally fair review process for doctors.

PROFESSIONAL LIABILITY

HOW TO CONDUCT PEER REVIEW

Comprehensive guidelines for the conduct of peer review are contained in the Health Care Quality Improvement Act of 1986. It is not necessary to follow those guidelines to the letter in order to have fair procedures. The guidelines provide a good framework. In general, hospitals, medical staffs, and peer reviewers should observe the following guidelines:

RULE 1 In any situation where it appears that a disciplinary proceeding may be instigated against a physician that could result in the substantial loss or termination of the physician's clinic privileges, the advice and guidance of legal counsel should be sought by those persons who are involved in this phase of the peer review process. The attorney's participation should continue in preparation for the hearing including the written notice of charges, the marshalling of evidence and the facts, and the selection of witnesses. The attorney should be instructed that his role is not that of a prosecutor, but as an advisor in assuring that the proceedings are conducted fairly, bearing in mind the objective of protecting consumers of health care and the physician involved against false or exaggerated charges.

RULE 2 The attorney advising the hearing panel and the attorney representing the physician involved in the proceeding should be accorded reasonable latitude in cross-examination, but acrimony should not be allowed by the hearing panel.

RULE 3 Substantial latitude should be permitted in the presentation of evidence, medical reference works, and testimony, within reasonable time constraints and the discretion of the hearing panel.

RULE 4 A court reporter should be present to make a verbatim transcript of the hearing that should be available to the parties and paid for by the hospital or health care entity.

RULE 5 Within the discretion of the hearing panel, witnesses may be requested to testify under oath.

RULE 6 The hearing panel should consist of physicians, none of whom are direct economic competitors with the physician involved or who stand to gain through a recommendation or decision adverse to the physician. It is desirable that members of the hearing panel be physicians who have the respect of the medical community, but they need not be in the same specialty as the physician involved.

RULE 7 Physicians who are direct economic competitors of the physician involved may testify as witnesses whether they are called by the physician, the hearing panel, or the hospital, but a physician should not be deprived of his privileges solely on the basis of medical testimony by economic competitors. In any proceedings that result in the termination of privileges, there should be testimony from one or more physicians who are not economic competitors or who do not stand to gain economically by an adverse action, but who are knowledgeable in the treatment, patient care management, and areas of medical practice or judgment upon which the adverse action is based.

RULE 8 When investigation indicates that a disciplinary proceeding is warranted for the purpose of terminating a physician's hospital privileges, he should not be permitted to resign without a finding that his termination occurred without cause. The disciplinary proceedings should be conducted by the hearing panel with the presentation of testimony and evidence, irrespective of whether the physician involved chooses not to be present. **(Reprinted with permission from *The Citation,* American Medical Association, Volume 59, July 15, 1989)**

HEDONIC DAMAGES CONCEPT GROWING

Hedonic damages, or the loss of pleasure derived from the pursuits of life, appear to be on the increase. That is the conclusion reached by Ted Miller, an economist at the Urban Institute, a Washington, DC, think tank, in a forthcoming study to be published this fall by the Northwestern University Law Review.

According to *Wall Street Journal* columnist Paul M. Barret, Miller's study shows that "despite fierce opposition by defense lawyers, the idea is quickly gaining acceptance."

As of early July, courts in Connecticut, Mississippi, New Mexico, and New York had accepted hedonic damages, and lawyers have introduced such damages with varying degrees of success in cases in an additional 27 states.

Properly "fine-tuned," the economist warns that hedonic damages could yield a value between $1 and $1.5 million for a person 38 years of age. The problem is that "some overly high awards" could result, posing a lot of headaches for the insurance industry and defense attorneys.

Miller's advice is to accept hedonic damages as a legitimate measure, but learn to fight for their appropriate application. **(*Medical Liability Monitor,* September 29, 1989)**

JUDGES GET SUED TODAY

Judges, whose immunity against liability actions has been diminished by recent court decisions, are increasingly buying protection, according to a recent *Wall Street Journal* article.

"Judges are sued far more often than the public would believe," said Kent Batty, court administrator for the state courts in Wayne County, Michigan. "And for the past few years, there has been a mounting concern over liability."

Judge Phillip J. Roth of the Oregon Supreme Court said, "Judges realize now that one moment they can be on the bench and the next, they are in the pit being defended." Judge Roth, chairman of the Judicial Immunity Committee of the American Bar Association, stated at least 800 suits are filed against judges each year.

One insurance broker estimates that about 3,000 state judges and 300 federal now carry liability policies. **(*Medical Liability Monitor,* August 25, 1989)**

PROFESSIONAL LIABILITY

James E. George, MD, JD, is the director of the Department of Professional Liability Control, Medical Society of New Jersey. If you have any questions, concerns, or complaints about your professional liability, please contact A. Ronald Rouse, director of Special Projects, Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ.

MSNJ NEWSLETTER

1989 MEDICARE COST SHIFT APPROVED

The Hospital Rate-Setting Commission (HRSC) approved the revised Medicare Cost Shift methodology for 1989 at its October 27, 1989, meeting. The revised statewide Medicare shortfall now is estimated by the Department of Health to be approximately $116 million, up from the previous estimate of $34 million. Approximately 70 percent of Chapter 83 hospitals are expected to have a shortfall of Medicare payments in 1989. The Department anticipates incorporating the new cost shift amounts into hospital November markup factors. In order to mitigate the impact of wide changes in markup factors as a result of the annualization of these cost shifts over the last two months of 1989, the Department will adjust the markup factors based on a corridor policy that also was approved by HRSC.

NEW DIRECTOR OF HOSPITAL REIMBURSEMENT

The Department of Health announced that Anne Weiss has been appointed as the director of hospital reimbursement at the Department of Health. The appointment became effective as of October 16, 1989. Ms. Weiss's background includes working on the professional staff of the U.S. Senate Committee on Finance and experience with the federal Office of Management and Budget and the federal Medicare system. The position of director of hospital reimbursement has been vacant since the resignation of Alan Rosenberg in April 1989.

CHOLESTEROL STANDARDIZATION PROGRAM

The New Jersey Department of Health has announced the establishment of a State Cholesterol Standardization Program. Funds have been provided by the Department to the Robert Wood Johnson School of Medicine in New Brunswick to develop and implement a statewide standardization program. The purpose of the program is to help the state's licensed clinical laboratories meet the National Institute of Health's recommended levels of precision and accuracy reporting cholesterol test results. All licensed clinical laboratories in New Jersey are invited to participate in the program. One outcome of the program will be the publishing of a directory of the standardization laboratories by the New Jersey affiliate of the American Heart Association and the Robert Wood Johnson School of Medicine. Interested parties should contact the Department of Health for more information.

UNCOMPENSATED CARE REGULATION APPROVED

The Health Care Administration Board (HCAB) adopted the Department of Health's amendments to the Uncompensated Care Credit and Collection Regulations, with some modifications, at its November 9 meeting. The dollar threshold for compliance was raised from $150 to $200 and the requirement of using a two-color envelope was removed. The language of the regulation was changed to remove the requirement of deferring medical services. However, if hospitals cannot obtain complete information from the patient, they must document why the information was not obtained.

The Department indicated that it will develop flexible audit guidelines. The audit guidelines must be presented to the Hospital Rate-Setting

Commission for final approval. The HCAB also requested the Department to provide a cost/benefit analysis of the new Uncompensated Care Credit and Collection Regulations.

HOSPITAL PROFILES REQUIRED BY HRSC

The Hospital Rate-Setting Commission (HRSC) has notified all hospitals that an updated hospital profile must be submitted before action will be taken on a hospital's schedule of rates. The profile includes historical information through 1988 on statistical items such as admissions, patient days, payer mix, uncompensated care, charity care, same-day surgery cases, and other outpatient data.

HRSC sends a copy of the hospital's most current profile to the hospital when a meeting date has been assigned and requests the hospital to review the data and correct and update it as necessary.

NURSING AWARDS

The Department of Health has completed its review of 71 hospital proposals for the nursing incentive reimbursement awards. The Department awarded a total of $7.1 million to 23 hospitals. Awards ranged from $126,000 to $500,000 for individual hospitals. Areas in the approved proposals included management computers, bedside computers, staff training, other equipment, and organizational restructuring. The Department will recommend 1990 rate increases for the 23 hospitals to the Hospital Rate-Setting Commission. The Department also will recommend a monitoring and evaluation component to assure that funds are spent in accordance with the approved proposals. Department staff will be involved in the monitoring activities.

GME LIABILITY

The final published Medicare regulations on medical education programs cite that the Medicare program is due approximately $440 million in overpayments. Until now, the medical education methodology reimbursed hospitals for all residency programs based on reasonable costs. Now, a hospital will be reimbursed for allowable medical education costs divided by the number of interns and residents, which then will be multiplied by the weighted average number of FTE residents during the period and adjusted for inflation by using the consumer price index in each consecutive year after the base period. The base period utilized will begin on or after October 1, 1983, and end before October 1, 1984.

The new methodology will have a substantial impact on teaching hospitals since the cost received under the previous methodology has long been spent. In addition, many hospitals will have to revise their 1990 budgets to reflect the change. It is anticipated that more than 50 percent of the hospitals effected will be filing an initial appeal challenging the constitutionality of the retroactive rule. Once the liability has been determined by Medicare intermediaries, hospitals will have 180 days to appeal the decision or pay their liability.

SUMMER RESEARCH FELLOWSHIP

The M. Louise Carpenter Gloeckner, MD, Summer Research Fellowship Award Committee of the Archives and Special Collections on Women in Medicine, The Medical College of Pennsylvania, is accepting applications for summer 1990 research using materials in the Archives and Special Collections at the College. The Archives houses the business and academic records of The Medical College of Pennsylvania dating from its founding in 1850 as the Female Medical College of Pennsylvania. Two grants of up to $1,500 each for four to six weeks of research in the Archives will be made to applicants selected by the Award Committee. For an application and description of the Fellowship, contact the Archives and Special Collections on Women in Medicine, The Medical College of Pennsylvania, 3300 Henry Avenue, Philadelphia, PA 19129.

MEDICARE HMOs HURT BY SKILLED NURSING FACILITIES

HCFA and Medicare HMOs are at odds over a rule that clarified when skilled nursing facilities (SNF) could accept patients. As a result of the April 1988 clarification, beneficiaries have used skilled nursing care and HMOs have incurred costs that were not anticipated. Since HCFA payments to Medicare HMOs for SNF coverage are on a prospective flat rate based on expected costs for a year, HMOs have incurred substantial losses that they have not been able to recover from HCFA. This rule is expected to impact 131 Medicare HMOs in 35 states with plans in California, Florida, and Minnesota expected to suffer the greatest losses. In Minnesota, SNF costs incurred by HMOs have increased by 400 to 700 percent.

INDIRECT MEDICAL EDUCATION ADJUSTMENT

The Prospective Payment Assessment Commission has released data accumulated during the fourth year of the Medicare Prospective Payment System (PPS) that estimates the indirect medical education (IME) factor at 3.5 percent. The Commission's previous estimate was 4.4 percent. ProPAC attributed the decrease in the IME factor to the increased sensitivity of DRGs to the severity of illness as a result of refinements to PPS. ProPAC has urged Congress to adjust the IME factor for 1990 to 6.6 percent from its current 7.7 percent level. The Senate 1990 reconciliation package would reduce the indirect medical education add-on to 7.1 percent, while the House has recommended no change in the factor.

ATTRACTING AND RETAINING PHYSICIANS

A subcommittee of the House Committee on Veterans' Affairs has charged the Department of Veterans' Affairs with serious deficiencies in salary levels, research opportunities, and work environment in its efforts to recruit and retain physicians. The subcommittee also charged the Department with failure to adjust salaries to reward long-term service. The subcommittee concluded that the deficiencies can be remedied and recommended using bonus pay incentives as a way for recruiting and retaining physicians from specialties experiencing acute labor shortages.

SUPPLEMENTARY MEDICAL INSURANCE PREMIUMS

Monthly premiums for enrollees, age 65 and over, in the Medicare Supplementary Medical Insurance (SMI) Program for calendar year 1990 will be $29 compared to the 1989 monthly premium of $27.90. Monthly premiums for disabled enrollees in the SMI Program will increase from $34.30 in 1989 to $44.10 in 1990.

HCFA ADMINISTRATOR DECISION

The HCFA administrator has upheld a Provider Reimbursement Review Board decision that found a hospital operating a 46-bed facility that closed and subsequently opened as a new 120-bed facility was not entitled to be classified as a new hospital under the Medicare Prospective Payment System (PPS). The administrator noted that the provider did not file separate cost reports for the old and new facilities, carried over its old provider number, and failed to request status as a new hospital until well after its first year of PPS had ended.

GRAMM-RUDMAN TRIGGERED

As a result of the Senate not being able to get the budget finalized in time, the Gramm-Rudman balanced budget law went into effect on October 16, 1989. Medicare payments to hospitals, doctors, and other providers will drop approximately 2.1 percent. The payment reduction will apply to community and migrant facilities, Indian health facilities, and veteran medical care.

PHYSICIAN CARE MONITORED

A new quality-assurance program is being tested by Private Healthcare Systems, a Massachusetts-based preferred provider organization (PPO) owned by 17 insurance companies. Using data furnished by physicians, patients, and insurers, the program will review physicians' care by 13 different quality screens that identify frequent hospital readmissions and the use of outdated procedures. Private Healthcare Systems operates 40 individual PPO networks in 26 states, and has approximately 1.1 million enrollees and 30,000 participating physicians.

INVESTIGATIONAL NEW DRUG TREATMENTS

Princeton Biomedical Research is conducting studies that may be of interest to the patients of Medical Society members. These are investigational new drug treatments for depression, anxiety, age-associated memory difficulties, and Alzheimer's disease. The memory testing, available in ten sites nationwide, involves state of the art computerized testing simulating real-life situations. The programs are free to qualifying individuals. For further information, contact Dr. Apter at 609/921-3555.

NEW POSITION FOR LANCIANO

Ralph C. Lanciano, Jr, DO, of Haddonfield, was appointed chairman of the Eye Section of the Camden County Medical Society. He also was appointed to the Board of Governors of the New Jersey Academy of Ophthalmology. Dr. Lanciano is a clinical assistant professor at the University of Pennsylvania's Department of Ophthalmology, Scheie Eye Institute. In addition, he serves as a clinical associate professor at UMDNJ-School of Osteopathic Medicine. Dr. Lanciano is a section head at Kennedy Memorial Hospital University Medical Center, Stratford Division, and is attending ophthalmologist for the New Jersey State Police.

CHILDHOOD ITP INVESTIGATION

The New Jersey Pediatric Hematology/Oncology Network (NJPHON) is conducting a study to compare the efficacy of treatment modality, total monetary cost differential, emotional cost differential, and lymphocyte function differences in children with newly diagnosed acute ITP (idiopathic thrombocytopenic purpura). Children eligible for study will be prospectively randomized to steroid treatment versus intravenous gammaglobulin (IVIG) versus (in select cases) observation alone. Total costs (financial and emotional) will be assessed at varying times via questionnaire. Lymphocyte function tests will be performed four times during the first six months of treatment/observation. The cost of the IVIG and lymphocyte function testing is being underwritten by a grant; call NJPHON for more information.

HEALTH RESEARCH FELLOWSHIPS

The Advanced Research Fellowship Program is sponsored by the Governor's Council on the Prevention of Mental Retardation and Developmental Disabilities. Each fellow will receive $25,000 a year and the award is renewable for one year. Applications are due February 2, 1990. The purpose of the program is to encourage researchers in their efforts to learn more about the causes of mental retardation and developmental disabilities. Candidates must have been awarded a PhD or MD to be qualified for consideration. Candidates also must document their acceptance for postdoctoral training under the supervision of an appropriate mentor at a nonprofit research institution in New Jersey. For information, call the Office for Prevention of Mental Retardation and Developmental Disabilities at 609/984-3351 or write to Dr. Deborah Cohen, Director, Office for Prevention of MR/DD, CN 700, 222 South Warren Street, Trenton, NJ 08625.

FINI

"Appreciating what you have instead of being miserable about what you don't have, is so difficult for the human mind to comprehend."

PRESIDENT'S PAGE

POLITICAL EFFECTIVENESS In the November issue of *NEW JERSEY MEDICINE,* I wrote about political action and its importance in our program of political effectiveness—effectiveness in dealing with health policy and public policy that impacts upon our profession and our patients. I appreciate the enthusiastic comments and support this article generated. However, "political action" is but one phase in our coordinated program of political effectiveness. Other activities include the following:

COMMUNICATING. We have an ongoing program of discussion with our legislative leaders. We do not approach our legislators only when we have a problem or a request. We discuss our priorities, and our perceptions of the health needs of New Jersey. And, we listen to their perceptions, their ideas, and their advice as to what is politically practical.

SELECTING ISSUES AND NARROWING FOCUS. We will not be effective if we try to deal with the hundreds of bills peripherally affecting our profession, in any given legislative session. We always are able to identify the major general issues that require our focus, attention, and major efforts. We will not ignore other or peripheral issues, but we will not forget our major objectives.

DEALING ACTIVELY, VIGOROUSLY, AND HONESTLY. Our major issues require the efforts of the leadership of MSNJ, our lobbyists, and our key contacts. These efforts are coordinated through the MSNJ office, for maximum effectiveness. Our discussions with legislators must be strong, but never less than completely honest if we are to maintain our credibility.

BEING FIRM, YET FLEXIBLE. We will take an unyielding stand on essential issues. But, we also understand the political process, and the need to participate in the process of negotiation that often occurs as legislation is formed. We are not willing to stand aside from this. This process can make the "inevitable" a little less onerous; and can help us to achieve at least part of the "impossible."

NEVER MAKING ENEMIES. We work hard at achieving generally good relationships with as many legislators as possible. This does not mean that they will do our bidding; it usually means, however, that our point of view will be heard and considered. There is a pattern of shifting alliances with virtually every bill. No single legislator supports us on every issue. Similarly, there is no legislator in New Jersey who opposes us on every issue. We cannot afford to designate as an "enemy" a legislator who opposes us on an important issue; that legislator's vote may be the one that we need on a subsequent issue. Every senator and assemblyman is likely to oppose us some of the time, and occasionally be an adversary; we always seek the opportunity to continue our conversations with these legislators, and to hope that they will be our proponents on a subsequent issue.

This is our program. We follow these steps, and maintain a coordinated program, always remembering our major goals, and the need to be working toward these goals on a daily basis. ☐

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LEVOXINE® *(Levothyroxine Sodium Tablets, USP)* For oral administration

The following is a brief summary. Before prescribing, please consult package insert.

INDICATIONS AND USAGE:

LEVOXINE (L-thyroxine) tablets are indicated as replacement or supplemental therapy for diminished or absent thyroid function, resulting from functional deficiency, primary atrophy, from partial or complete absence of the gland or from the effects of surgery, radiation or antithyroid agents. Therapy must be maintained continuously to control the symptoms of hypothyroidism.

CONTRAINDICATIONS:

L-thyroxine therapy is contraindicated in thyrotoxicosis, acute myocardial infarction and uncorrected adrenal insufficiency.

WARNINGS:

Drugs with thyroid hormone activity, alone or together with other therapeutic agents, have been used for the treatment of obesity. In euthyroid patients, doses within the range of daily hormonal requirements are ineffective for weight reduction. Larger doses may produce serious or even life-threatening manifestations of toxicity, particularly when given in association with sympathomimetic amines such as those used for anorectic effects.

PRECAUTIONS:

Caution must be exercised in the administration of this drug to patients with cardiovascular disease. Development of chest pains or other aggravation of the cardiovascular disease requires a reduction of dosage.

Patients on thyroid preparations and parents of children on thyroid therapy should be informed that replacement therapy is to be taken essentially for life. They should immediately report during the course of therapy any signs or symptoms of thyroid hormone toxicity, e.g., chest pains, increased pulse rate, palpitations, excessive sweating, heat intolerance, nervousness, or any other unusual event. In case of concomitant diabetes mellitus, the daily dosage of antidiabetic medication may need readjustment. In case of concomitant oral anticoagulant therapy, the prothrombin time should be measured frequently to determine if the dosage of oral anticoagulants is to be readjusted.

Partial loss of hair may be experienced by children in the first few months of thyroid therapy, but this is usually a transient phenomenon and later recovery is usually the rule.

Drug Interactions — In patients with diabetes mellitus, addition of thyroid hormone therapy may cause an increase in the required dosage of insulin or oral hypoglycemic agents.

Patients stabilized on oral anticoagulants who are found to require thyroid replacement therapy should be watched very closely when therapy is started.

Cholestyramine binds both T_4 and T_3 in the intestine, thus impairing absorption of these thyroid hormones. Four to five hours should elapse between administration of cholestyramine and thyroid hormones.

Estrogens tend to increase serum thyroxine-binding globulin (TBg). Patients without a functioning thyroid gland who are on thyroid replacement therapy may need to increase their thyroid dose if estrogens or estrogen-containing oral contraceptives are given.

Drug/Laboratory Test Interactions — The following drugs or moieties are known to interfere with laboratory tests performed on patients taking thyroid hormone: androgens, corticosteroids, estrogens, oral contraceptives containing estrogens, iodine-containing preparations, and the numerous preparations containing salicylates.

Carcinogenesis, Mutagenesis, And Impairment of Fertility — A reported apparent association between prolonged thyroid therapy and breast cancer has not been confirmed. No confirmatory long-term studies in animals have been performed to evaluate carcinogenic potential, mutagenicity, or impairment of fertility in either males or females.

Pregnancy-Category A — The clinical experience to date does not indicate any adverse effect on fetuses when thyroid hormones are administered to pregnant women.

Nursing Mothers — Minimal amounts of thyroid hormones are excreted in human milk. Thyroid is not associated with serious adverse reactions and does not have a known tumorigenic potential. However, caution should be exercised when thyroid is administered to a nursing woman.

Pediatric Use — The incidence of congenital hypothyroidism is relatively high. Routine determinations of serum (T_4) and/or TSH is strongly advised in neonates in view of the deleterious effects of thyroid deficiency on growth and development.

ADVERSE REACTIONS:

Adverse reactions are due to overdosage and are those of induced hyperthyroidism.

OVERDOSAGE — Excessive dosage of thyroid medication may result in symptoms of hyperthyroidism, which may not appear for one to three weeks after the dosage regimen is begun. The most common signs and symptoms of overdosage are weight loss, palpitation, nervousness, diarrhea or abdominal cramps, sweating, tachycardia, cardiac arrhythmias, angina pectoris, tremors, headache, insomnia, intolerance to heat and fever. If symptoms of overdosage appear, discontinue medication for several days and reinstitute treatment at a lower dosage level.

Complications as a result of the induced hypermetabolic state may include cardiac failure and death due to arrhythmia or failure.

Dosage should be reduced or therapy temporarily discontinued if signs and symptoms of overdosage appear.

Treatment of acute massive thyroid hormone overdosage is aimed at reducing gastrointestinal absorption of the drugs and counteracting central and peripheral effects, mainly those of increased sympathetic activity. Measures to control fever, hypoglycemia, or fluid loss should be instituted if needed.

DOSAGE FORMS AVAILABLE:

LEVOXINE (L-thyroxine) tablets are supplied as oval, color coded, potency marked tablets in 11 strengths: 12½ mcg (0.0125 mg) - maroon, 25 mcg (0.025 mg) - orange, 50 mcg (0.05 mg) - white, 75 mcg (0.075 mg) - purple, 100 mcg (0.1 mg) - yellow, 112 mcg (0.112 mg) - rose, 125 mcg (0.125 mg) - brown, 150 mcg (0.15 mg) - blue, 175 mcg (0.175 mg) - turquoise, 200 mcg (0.2 mg) - pink and 300 mcg (0.3 mg) - green, in bottles of 100 and 1000, and unit dose in cartons of 100 (10 strips of 10 tablets), 200 mcg and 500 mcg injectable (see injectable package insert).

EDITOR'S DESK

A NEW BROOM?

Dr. Burton J. Lee III, personal friend of George Bush, now is the physician to the president of the United States. In that role, he has the potential to influence greatly the health care delivery system in the nation and to change markedly the patient-physician-hospital relationships.

An interview of Dr. Lee by Dennis L. Breo in the November 17, 1989, issue of the *Journal of the American Medical Association* is an eye-opener and deserves your careful reading.

Dr. Lee, who spent all his professional life in a salaried position at Memorial Sloan-Kettering Cancer Center in New York City, has made it clear that he intends to expand the activities of the White House physician "so that when I leave here eight years from now—it is one of the premier health policy positions in the nation."

He believes that medical resources should be rationed, that "some physicians tend" to overtreat the patient and to overdo procedures. "We're never going to get a handle on medical costs unless we take the piecework out of medicine, especially the procedures performed in the surgical subspecialties." "It's a tremendous conflict of interest for a surgeon's income to depend upon how many procedures he does." "Of course, I can't say that I am for putting all physicians on salary, but if I were the president or the chairman of a House or Senate subcommittee on health, I'd have to look at it, sure."

Somehow this anticapitalistic, socialistic approach brings to mind a debate reported years ago about the virtues of fee-for-service medicine versus the salaried type. Dr. Francis D. Moore of Boston espoused the first point of view and Dr. George Crile, Jr, of Cleveland espoused the latter point of view. Both were eloquent in presenting their arguments, no blood was spilled and no clear-cut decision was reached, but both agreed that members of the most-honored profession could be relied on, by-and-large, to do the right thing. It is most unfortunate that Dr. Lee feels otherwise.

Perhaps Dr. Lee, unknowingly—to be kind—is refueling the town-gown conflagration that should have fizzled out years ago. Today, even the family doctor is residency trained. Would he have this caring physician relegated to triage? Would he have the patient shipped to a specialty hospital away from the family and community support he cherishes? (The recent failure of the Oral Roberts Medical School and Hospital occurred, at least in part, because patients' strong desires to be treated at home were not recognized.)

Is the LMD again to become the object of derision and snide comment? Are community hospitals worthless? Should all rural hospitals be closed?

An entire career spent on salary in a medical center is not exactly comparable to being in the trenches, no matter how caring the hospital-based physician. Memorial Sloan-Kettering Cancer Center is a magnificent institution, brilliantly staffed and buttressed by support systems that are the envy of most other centers. Medicine cannot be practiced only at that level, now or in the foreseeable future. We would surely bankrupt the country if we tried.

So please, Dr. Lee, temper your experiences with the evaluations of others. Those of us who belong to "organized medicine" do have our patients' interests first and foremost, but hope that changes will not make sacrificial lambs of well-meaning physicians. Even your erstwhile colleague, Dr. Murray Brennan, chairman of the Department of Surgery at Memorial Sloan-Kettering Cancer Center said, "The requirements of bureaucracy—filling out paperwork—are demoralizing. Even worse, it makes it impossible to do what we should be doing—spending more time with the patient, instead of defensive paper management." In your review of health care costs, try to remember Henry Clay's advice, "Statistics are no substitute for judgment." And if you feel that taking care of your patients took "a lot out of you," visualize how many of us are suffering and struggling without the support system you enjoyed, especially those that took a large part of bureaucracy off your back. If only the rest of us could be so lucky. ☐

JOURNAL ARTICLES

With the tremendous increase in research being performed in New Jersey, the Committee on Publication voted to increase the documentation on research published in *NEW JERSEY MEDICINE.* Beginning with this issue of our journal, all articles will include the date the article was received and the date of acceptance by *NEW JERSEY MEDICINE.* The Committee believes this policy will give authors more appropriate credit for their original research and provide for timeliness of reporting of the work being done in New Jersey.

LETTERS TO THE EDITOR

Letters to the editor are welcome. Communications should be sent to *NEW JERSEY MEDICINE,* MSNJ, Two Princess Road, Lawrenceville, NJ 08648.

BOOK REVIEWS

ATLAS OF OTOLOGIC SURGERY

Marcos V. Goycoolea, MD. W. B. Saunders Company. This extremely well-written book is an atlas of otologic surgery. The text graphically displays the usual surgical procedures performed in otology. The drawings and pictures are absolutely superb and the descriptions are excellent. This atlas, obviously, belongs on the shelf of every otolaryngologist. But, more than that, any medical student interested in ear surgery would find the text a great help in understanding the procedures of this specialty. This book can be utilized by anyone wanting a fuller understanding of ear surgery. It is a superb atlas. ☐ Harold Arlen, MD

EMERGENCY MEDICINE. THE ESSENTIAL UPDATE

George R. Schwartz, MD, Nicholas Bircher, MD, Barbara K. Hanke, MD, et al. Philadelphia, PA, W.B. Saunders Company, 1989. Over the years, I have written a number of book reviews, in part to keep up with newly published material. Frequently, however, the books I have reviewed have not been strikingly relevant, but *Emergency Medicine. The Essential Update* is an exception; it is more than a textbook.

By their nature, medical textbooks cannot remain on the cutting edge of advances. This is a problem in the area of emergency and acute care medicine where change happens quickly and across a broad spectrum of medical specialties. This book accomplishes what it promises to do—namely, to provide a "cutting-edge" update that can supplement any textbook of emergency medicine as well as textbooks of internal medicine, surgery, and family practice. In fact, it does offer essential and focused information which can be lifesaving. Since I am a practicing emergency physician, I have found this book to contain concise, relevant, and practical information to assist me in the care of my patients. The fact that it is not a weighty, medical tome means the reader is able to digest more of its information than a typical medical textbook.

It is a pure coincidence that I personally know two of the six editors of this fine book. I have not had conversations with either one of them about this matter. They have not asked me to speak kindly of their book. Nonetheless, the book deserves to be spoken about in a kind fashion and, more importantly, the book deserves to be in the library of every practicing emergency physician. ☐ James E. George, MD, JD

SOCIAL SIGNIFICANCE OF SPORT

Barry D. McPherson, PhD, James E. Curtis, MA, John W. Loy, PhD. Champaign, IL, Human Kinetics Books, 1989. This book is a textbook for psychology students; yet it makes very interesting reading for anyone who has more than a passing interest in sports. The authors discuss a variety of topics dealing with the social, economic, political, and legal aspects of sports, and how these various entities react with each other and with such other factors such as race relations, women's liberation, social interaction, class structure, subcultures, and age-related activities. Included in the book is a wealth of historical background material relative to the previously mentioned topics and, hence, the book is a valuable reference in this regard. I recommend it as a book to read for those concerned about sports medicine or for those physicians with an interest just in sports per se. ☐ Christine E. Haycock, MD

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Lithotripsy at The New Jersey Kidney Stone Treatment Center can be the alternative.

Convenience–The New Jersey Kidney Stone Treatment Center is centrally located in downtown New Brunswick, near major highways, for easy access for you and your patients.

Flexible scheduling–The Center offers scheduling with no delay. In most cases, your patient can be treated within a week of your call. Our extended hours allow you to make appointments at the convenience of both you and your patients.

Bath-free equipment–The Center is equipped with the most advanced Dornier HM4 lithotripter, eliminating the need for a water bath, allowing for easier patient handling and greater patient comfort. Also in use is a state-of-the-art Shimazdu Hydrojust III cystoscopy table.

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Physician billing–Urologists treating patients at the Center have the advantage of billing their patients or third-party payers directly through their own offices.

Easy referral system–If desired, physicians can easily refer their patients to one of our staff Urologists for lithotripsy treatment.

HMO eligibility–The Center has established arrangements with most major area HMO's.

For more information regarding how the Center can help you and your kidney stone patients, call *1-800-542-8887* or *(201) 937-8614*.

New Jersey
Kidney
Stone
Treatment Center

Located at Robert Wood Johnson University Hospital
New Brunswick, New Jersey 1-800-542-8887

The New Jersey Kidney Stone Treatment Center is operated by Health Horizons (ESWL), L.P., affiliated with the following hospitals: Community Memorial Hospital, Freehold Area Hospital, Helene Fuld Medical Center, Jersey Shore Medical Center, Raritan Bay Medical Center, Riverview Medical Center, Robert Wood Johnson University Hospital, St. Francis Medical Center, St. Peter's Medical Center, Somerset Medical Center.

Medication Errors: 1977 to 1988

Experience in Medical Malpractice Claims

SUZANNE L. KUEHM, MPH
MICHAEL J. DOYLE, MD

The Risk Prevention Department of the Medical Inter-Insurance Exchange of New Jersey (MIIENJ), a physician-owned carrier, was established on February 1, 1983, by its Board of Governors. Two of the objectives of the Department are to decrease patient injury and to reduce medical malpractice claims with its attendant emotional and economic stresses. It appears that medication error is one area where risk prevention efforts could make a significant contribution towards meeting these goals. Therefore, it seems beneficial to analyze all cases where indemnity was paid due to a medication error.

PROCEDURE

All cases identified previously as having a medication error as a significant cause of the suit and closed with a payment to the plaintiff during the period of February 1, 1977, through December 31, 1988, were reviewed. There was a total of 337 files reviewed, inclusive of all specialties. In 57 percent of these files, medication error was the primary cause of the suit and, in the remaining files, it was an important factor. Total indemnity paid was $30,144,636, an average of $89,450 per file. Thirty-four distinct performance errors were identified, and there were between one and five of these performance errors in each of the 337 files analyzed. Only those actions which indicate a trend are reported here. The actions are organized into nine categories: allergic reaction; error in writing the prescription; communication failure; administration of excessive dose of medication; prescription of contraindicated medication; failure to monitor drugs for toxic levels; treatment with antibiotics; prescription of medication to treat symptoms; and generic drugs.

TRENDS

A. Allergic Reaction (indemnity paid, $1,063,657). There were 34 files involving allergic reactions. These cases resulted in six deaths, one profoundly brain-damaged patient (permanent coma), and 14 anaphylactic reactions with electrocardiogram (EKG) changes, hypotension, respiratory difficulty, cyanosis, and facial edema resulting in hospitalization. In 5 files, the extent of the reaction was not specified, and the reactions in the remaining files consisted of gastrointestinal hemorrhage, cellulitis, and conjunctivitis. The deaths were due to the administration of penicillin (4 files), ampicillin (1 file), and ibuprofen (Motrin®) (1 file). Sodium thiopental (Pentothal®) was the cause of the severe brain damage in 1 file. Of all the allergic reactions, 16 were due to an allergy to penicillin and the administration of ampicillin (5 files), penicillin (6 files), bacampicillin hydrochloride (Spectrobid®) (2 files), oxicillin (1 file), amoxicillin (1 file), and ampicillin trihydrate (Principen®) (1 file). In 5 files, there was an allergy to acetylsalicylic acid (aspirin), and the physicians prescribed ibuprofen (Motrin®),

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Ms. Kuehm is a loss analyst, Risk Prevention Department, Medical Inter-Insurance Exchange of New Jersey (MIIENJ), and Dr. Doyle is chairman of the claims committee of MIIENJ and a member of the Board of Underwriters. Requests for reprints may be addressed to Dr. Doyle, MIIENJ, Two Princess Road, Lawrenceville, NJ 08648.

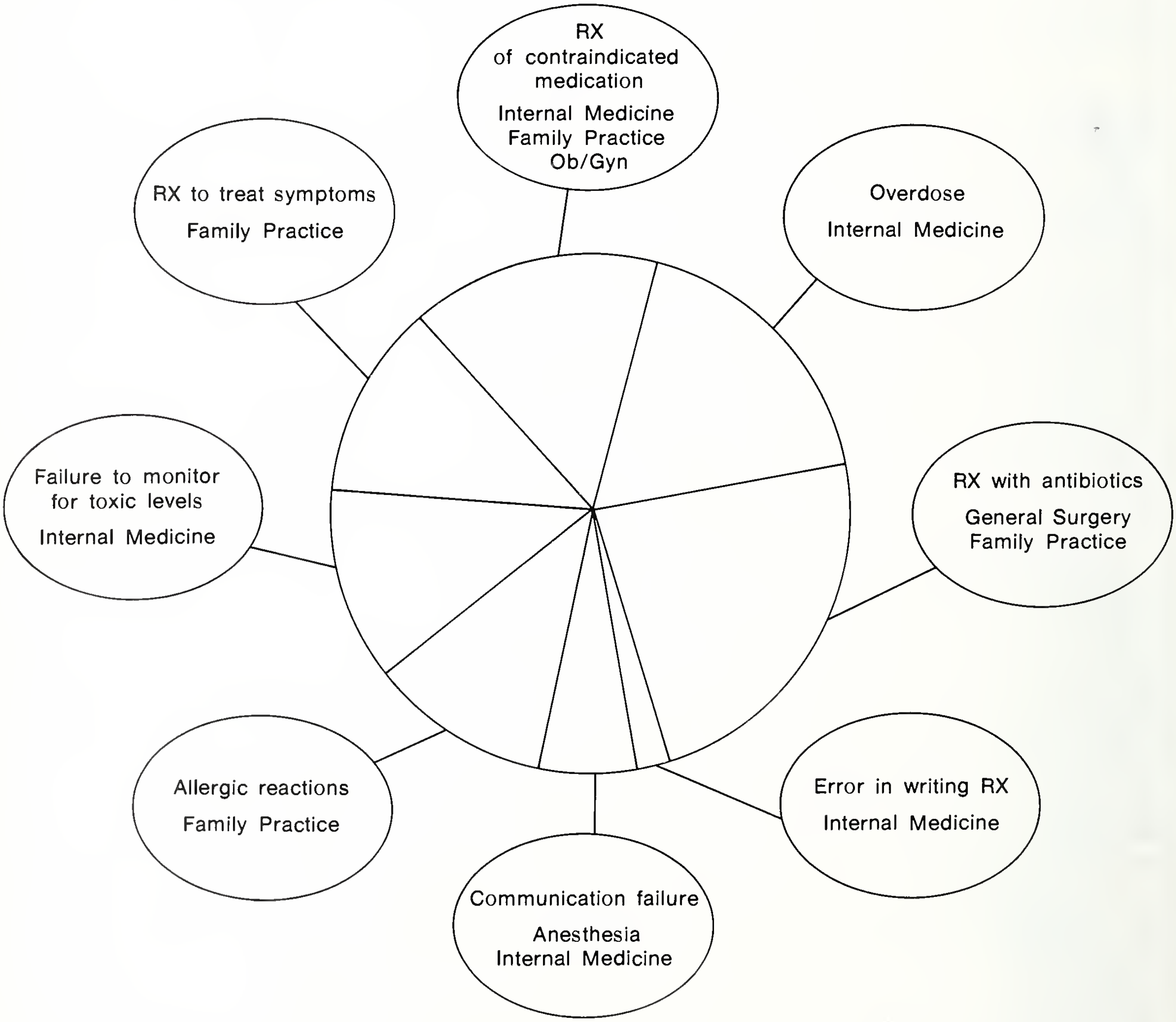
ascriptin, Darvon® compound, and Percodan®. The latter three drugs all contain acetylsalicylic acid (aspirin), and ibuprofen (Motrin®) is contraindicated for persons who have a history of allergy to acetylsalicylic acid (aspirin). In each of these events there was an indicator that should have alerted the physician against prescribing the drug. The following are examples.

1. The specific allergy was noted in the patient's office record or hospital chart, but the insured either never reviewed the office chart before prescribing the medication; admitted to overlooking the entry in the record; or failed to read the discharge summary of a previous hospitalization.

Example: A patient gave a history of an allergy to penicillin. The physician prescribed ampicillin. The patient developed a rash and difficulty in breathing requiring hospitalization. This was the second time this patient required hospitalization for an allergic reaction to ampicillin.

2. Some physicians stated that they were not "told forcefully enough, so the information didn't stick." Other physicians admitted that they had not questioned the patient regarding allergies. There also were some instances when a pharmacist had called to notify the physician that the patient was allergic to the prescribed medication and was told by the physician to "give the drug anyway," believing that it was still the best choice for the condition.

Example: A patient gave a history of allergy to penicillin. The same patient was given intravenous oxicillin preoperatively after induction, but before an incision was made. The patient developed a rash on the face and extremities, hypotension, and EKG



Medication Errors by Specialty. The named specialty within each sphere had the greatest number of suits within the specific error category (February 1, 1977, to December 31, 1988).

changes indicative of cardiac ischemia which necessitated aborting the procedure.

Example: A patient related that his father died from a reaction to sodium thiopental (Pentothal®). The patient was given sodium thiopental (Pentothal®) and, subsequently, developed a laryngospasm resulting in anoxic brain damage and permanent coma.

3. Office staff also have been responsible for patient injuries.

Example: The insured ordered a computed axial tomographic (CAT) scan and wrote "no dye" because of the patient's history of allergy to iodine. In addition, the patient verbally told the receptionist the same warning. The receptionist filled out the request form incorrectly, stating "use dye." The radiologist never saw the original request. The patient suffered anaphylactic shock requiring emergency hospital treatment with oxygen and intravenous steroids.

Example: An office staff member recopied patient information from part 1 to part 2 of a patient's chart and neglected to write down the patient's allergies on the second part.

4. There also is some indication that allergic reactions occurred because the insureds were not aware of the drug components of the medication or the drug manufacturers' warnings associated with the medication.

Example: The patient gave a history of previous allergic reaction to acetylsalicylic acid (aspirin). The insured prescribed ibuprofen (Motrin®). The patient developed an anaphylactic reaction with cardiopulmonary arrest, resulting in coma and death. *Physicians' Desk Reference* states, "Do not prescribe for patients who have a known sensitivity to acetylsalicylic acid (aspirin)."

★ Allergic reactions to prescribed medications have caused patient deaths and morbidity. In an effort to reduce the incidence of these claims and subsequent damages:

1. Do heed patient warnings of known or suspected allergies.
2. Indicate all allergies in bold lettering in the patient record. Ideally, this should be in the front of the chart where it will not be overlooked easily.
3. Question the patient regarding allergy to medications including over-the-counter (OTC) medications. If this is not possible, consult previous hospital records or prior treating physicians.
4. Be aware of the composition of drugs before prescribing medication.
5. Educate the office staff regarding the importance of allergy notations on charts and forms.
6. Radiologists should insist on seeing the original request for diagnostic imaging, especially when dye could be used.
7. If there is a need to prescribe a drug to which a patient is allergic, such as an antibiotic which would be life saving, consult first with a board certified allergist.

B. Error in Writing the Prescription (indemnity paid, $419,111). While this "error" did not appear frequently (six files), the damages and the potential for damage were great. It also is an error which easily is preventable and, therefore, merits inclusion. The following are examples from these files.

Example: A pediatrician wrote a prescription for phenytoin suspension (Dilantin® Suspension) taking into consideration the patient's age, weight, and serum phenytoin level. The insured did not specify pediatric suspension. The prescription was filled with adult-strength phenytoin (Dilantin®), which is greater than four times the pediatric stength. (Dilantin® Pediatric provides 30 mg of medication in 5 ml dose; adult strength, in contrast, contains 125 mg in 5 ml.)

Example: A 20-year-old with leukemia was hospitalized for induction chemotherapy and discharged to continue consolidation treatment with cytarabine (Cytosar-U®) at home. The pharmacist filled the prescription with cyclophosphamide (Cytoxan®). The patient took this drug for five days. This took the patient out of remission, and she died two months later. The pharmacist paid 3/4 of the indemnity, the insured paid 1/4 of the indemnity.

Example: A patient hospitalized for atrial fibrillation was discharged with a prescription for digoxin (Lanoxin®). The patient returned 24 hours later in digoxin toxicity. The physician had intended to prescribe 0.25 mg od but had written "4 tabs per day." Two tablets (0.125 mg per tablet) per day would have equaled 0.25 mg.

Example: An office nurse administered an injection of lorazepam 10 mg (Ativan®) instead of lorazepam 1 mg (Ativan®). The office nurse read the 1.0 mg as 10 mg.

★ It does not take long to recognize errors such as these can occur easily with both written and verbal orders. A few simple guidelines should help to minimize the chances of these errors occurring:

1. Never place a zero after a decimal; at times, the decimal may not be seen. (The U.S. Pharmacopea has requested drug companies to follow this guide in their labelling.)
2. Always use a zero before a decimal; decimals get lost on lines.
3. Use a fraction instead of a decimal between two numbers.
4. When writing prescriptions be careful of drugs that look alike, such as adriamycin versus acromycin or Cytosar® versus Cytoxin®.
5. Be careful of drugs that sound alike, especially when giving verbal orders to pharmacists, such as

Zantac® or Xanax®; and seldane or feldene.

6. As a safeguard against misinterpretation of both written and verbal prescriptions include the diagnosis or the reason for the drug for wheezing; give the strength 500 mg not two tablets of the dose; include directions for taking medication; and request the pharmacist to place warnings on the label.

(These suggestions were made by Michael R. Cohen, MS, RPh, clinical assistant professor, School of Pharmacy, Temple University, and assistant editor of *Hospital Pharmacy.*)

C. Communication Failure (indemnity paid, $1,215,878). There were 19 files where patient injuries occurred (including three deaths and one incident of loss of sight) as a direct consequence of the physicians: failing to communicate to another physician; failing to review the chart; failing to communicate effectively with a pharmacist; failing to communicate clearly with office staff; and failing to communicate effectively with an answering service. The following examples elaborate these points.

Example: During a presurgical interview, an anesthesiologist learned the patient had hepatitis several years earlier and decided, because of this, the patient should receive a narcotic anesthesia. A second anesthesiologist failed to read the note made by the interviewing anesthesiologist and gave halothane without any problems occurring. One week later the patient again had surgery. The patient again was given halothane because it was assumed that the patient was given the narcotic anesthesia previously. This resulted in the patient's death due to halothane hepatitis.

Example: The physician telephoned a prescription to the pharmacist for novocolchine (Colchicine®). He ordered 1 pill every 15 minutes until pain subsided, not to exceed 6 to 10 pills in 24 hours. The pharmacist omitted the limiting number in the directions for taking the drug. The patient took 35 pills in 24 hours resulting in renal failure and requiring renal dialysis. The pharmacist stated that he was not advised of the limit by the physician.

Example: A patient was being unsuccessfully treated with a variety of antibiotics for a postoperative infection. The physician requested an infectious disease consultation. The requested specialist never arrived to see the patient. After a lengthy hospitalization, the patient was discharged with no residual effects. A jury, however, faulted the insured for not following up on obtaining the consultation since he had documented his need for assistance in antibiotic management of this patient. The jury awarded the plaintiff $67,000.

Example: A patient on long-term maintenance with warfarin sodium (Coumadin®) was notified by the laboratory to contact his physician regarding his prothrombin time results. (The test result indicated the bleeding time was too prolonged.) The patient telephoned the insured's office and was told by the answering service to call back in one week, since the physician was on vacation. The patient complied, but by that time he had lost the sight in one eye due to a vitreous hemorrhage. A physician is responsible for giving sufficient instructions to the answering service. In this instance, the covering physician was not given the patient's telephone number by the answering service. From the earlier discussions, it is apparent that communication failures also resulted in allergic reactions and some erroneous prescriptions.

★ Breakdown in communication among professionals has caused medication errors which resulted in patient injury and death and led to successful medical malpractice suits. There are files where medical peer reviewers opined that the physicians did not deviate from the standard of care, but juries decided in favor of the plaintiff because they believed the physician had a duty to followup on a communication breakdown.

Decreased Awareness of Pharmacokinetics of Drugs. The broad category of decreased awareness of pharmacokinetics of drugs is composed of a variety of behaviors, including prescribing a dose of medication which is: too large; too potent for the presenting symptoms; a lower dose than required; administered by an improper route, contraindicated because of patient history or other concurrently prescribed medications; not monitored for toxic levels or adverse reactions; and lacking in proper instructions for administration. It appears that the best single explanation for these would be a less than desirable pharmacological awareness of the drugs prescribed. There were 152 files in this category. We will discuss only the most significant of these.

D. Administration of Excessive Dose of Medication (indemnity paid, $12,350,445). There were 57 files in this category, with 16 deaths, 11 patients with permanent injury, and 3 patients with brain injuries. (This category does not include overmedication due to a failure to monitor blood levels with resulting toxic levels of a drug being obtained.) Some case examples representative of these files follow.

Example: A three-year-old child with breathing difficulty was sedated with meperidine hydrochloride (Demerol®), promethazine hydrochloride (Phenergran®), and chlorpromazine hydrochloride (Thorazine®) for an electroencephalogram. The child never aroused. He vomited and aspirated, and then died. The peer reviewer opined that the dose was appropriate for a normal child, but not for one with breathing difficulty.

Example: A patient was treated for arthritis with high doses of steroids. The patient developed pancreatitis, gastritis, peritonitis, an abdominal abscess, and generalized sepsis before dying.

Example: Nine consecutive doses of Mannitol® were given to a patient prior to undergoing cataract surgery. The patient developed an electrolyte imbalance secondary to the Mannitol®, suffered a cardiac arrest, and died. The peer reviewer and defense expert opined that an inordinate amount of Mannitol® had been given.

★ Patients received an overdose of medication because physicians: failed to consider patients' individual requirements at the time of prescribing the drug, and were unfamiliar with pharmacodynamics of the drugs prescribed.

E. Prescription of Contraindicated Medication by Patient's History or Due to Noncompatability of Several Prescribed Drugs (indemnity paid, $5,774,346). There were 51 files in this combined category. There were 12 patient deaths, and 6 patients suffered severe brain damage. The majority of drugs which were contraindicated by patient's history were the anti-inflammatory drugs, both steroid and nonsteroidal, and medications which contain acetylsalicylic acid (aspirin). Typically, the patient had a low hemoglobin and hematocrit (that could be an indicator of active bleeding) or the patient gave a history of ulcer disease. After taking these drugs, the patients developed severe gastrointestinal hemorrhage requiring hospitalization, many transfusions, and sometimes surgery.

Example: A patient gave a history of bleeding from acetylsalicylic acid (aspirin) ingestion and having a gastrectomy 15 years earlier. The physician prescribed naproxen (Naprosyn®), and the patient developed a near-fatal gastric hemorrhage.

Example: A patient, who already was taking bronchodilators for asthma, was treated with pindolol (Visken®) for hypertension. This drug, like all beta-blockers, must be used with extreme caution in patients who have asthma. This patient died immediately after taking this drug.

In all 51 files, either one or several of the following behaviors were seen: the physician failed to take a complete history; the physician ignored the patient's complaints associated with taking the medication; or the physician disregarded the patient's medical history.

When the cases involving the prescription of two noncompatible drugs were analyzed, the drugs that appeared more than once were Actifed® and the combination of an anticoagulant with an anti-inflammatory medication. Commonly, the physicians never ascertained the present medications the patients were taking. For example, an orthopedist prescribed an anti-inflammatory drug without determining that the patient was taking warfarin sodium (Coumadin®), prescribed by an internist.

In some cases, the physician was not familiar with the pharmacodynamics of the drugs involved. For example, a patient was taking phenelzine dihydrogen sulfate (Nardil®). The patient saw her family practitioner for complaints of a cold. She relayed that she had previous reactions from the combination of other drugs with phenelzine dihydrogen sulfate (Nardil®). She was reassured that Actifed® was safe to use with phenelzine dihydrogen sulfate (Nardil®) which is an monoamine oxidase (MAO) inhibitor. Within 24 hours after taking Actifed®, she became comatose and remains dependent upon a caretaker for activities of daily living. (Sympathomimetics, of which Actifed® is only one example, are contraindicated with MAO inhibitors.)

★ It is imperative to thoroughly question patients regarding all medications they are taking. Also, a thorough awareness of pharmacodynamics of drugs prescribed is necessary to insure patient safety, especially in view of the number of medications many patients are taking at any one time.

F. Failure To Monitor Drugs for Toxic Levels or Adverse Reactions (indemnity paid, $2,036,471). There were 39 files in this category. The drugs which were found more frequently were gentamicin, warfarin sodium (Coumadin®), heparin sodium (Heparin®), the nonsteroidal anti-inflammatory group, and the digitalis derivatives. In every one of these cases, there was a failure or delay to obtain blood tests to monitor the patient's response to the drug. When the patient did offer complaints indicative of a toxic level or adverse reaction to the medication, the physician either failed or delayed in discontinuing the drug or checking the serum level of the drug. The patient damages were severe: five deaths, five patients with severe brain damage, and seven patients with total or severe hearing loss. The other patients had life-threatening events or prolonged hospitalization and recovery.

Example: An eight-month-old child was treated with gentamycin for nine days. No blood tests were done to monitor serum levels of the drug. The child is bilaterally deaf, with little chance of speech development, because of the age at which the hearing loss occurred.

Example: Warfarin sodium 25 mg (Coumadin®) was prescribed for a patient based upon a one-week-old blood test. The physician ignored the patient's complaints of side effects, resulting in a severe hemorrhage from the esophagus, necessitating many transfusions.

Example: Five days after being discharged from the hospital, a patient, who had been taking digoxin, suffered a cardiac arrest and died. The patient's digoxin level was 7; toxicity level is 2.5. During the patient's hospitalization, there had been no monitoring of the serum digoxin level.

★ There is evidence that it is difficult to defend a medication error when a patient injury occurs because the physician failed to follow the manufacturer's recommendation for performing periodic blood tests to access the serum level of the drug. This especially is true with gentamycin, warfarin sodium (Coumadin®), heparin sodium (Heparin®), digitoxin, and digoxin. It is of equal importance, when prescribing nonsteroidal anti-inflammatory drugs, to evaluate periodically the patient for adverse reactions.

G. Treatment with Antibiotics (indemnity paid, $5,867,802). There were 73 files involving inappropriate use of antibiotics. Of the 21 specialties represented in these 337 files, this performance error was found in 11 specialties. The actions consisted of failure to order a culture and sensitivity test; treatment with the wrong antibiotic; failure to re-evaluate when the infection did not respond to the prescribed antibiotic; failure to prescribe an antibiotic; and prescribing a lower dose than required.

In those files where a culture and sensitivity test was not performed, physicians stated the reasons for choosing the antibiotics were: "It usually was successful before," or "It is the routine antibiotic used in these cases." In each of these 15 files, the bacteria was not sensitive or was resistant to the prescribed antibiotic. The patients were treated inappropriately over a period of time and the majority of them suffered loss of limbs or digits. In other files, physicians prescribed antibiotics to treat presumed systemic infections (often by telephone diagnosis) before obtaining a blood culture. One patient had meningitis and, because of the wrong antibiotic therapy, suffered severe residual brain damage. In another example, there was a delay in diagnosing subacute bacterial endocarditis. Initial blood cultures were negative (false negative) due to prior long-term and inappropriate antibiotic treatment. This patient required surgery for mitral valve re-

Table. ***Additional reference materials for drug information.***

- **Drug Facts and Comparisons.** This text contains objective drug information to facilitate comparison of prescription and over-the-counter drugs. The information is organized by therapeutic use with groups and subgroups to facilitate comparison of drugs with similar uses. One physician reviewer found the section on "patient information" very desirable. This section reminds the physician what the patient should be told about the prescribed drug. This reference contains complete descriptive information on all drugs, regardless of current marketability (i.e. how long they have been available). Often *PDR* does not include detailed descriptions on older drugs. As drugs become available in generic form, they may disappear from future editions of *PDR*. This reference combines information which is pertinent to the physician from the drug package insert, current textbooks, and many professional journals. The editorial panel for *Drug Facts and Comparisons* consists of representatives of medicine and pharmacy from some of the most respected universities. The hardbound version of this reference is updated yearly; the looseleaf version is updated monthly. (*Facts and Comparisons,* 111 West Port Plaza, Suite 423, St. Louis, MO 63146-3098.)
- **Drug Information for the Health Care Professional.** Published by the U.S. Pharmacopoeial Convention, Inc., this publication has several advantages: it is indexed by indications for use for easy reference to drugs used in the treatment, prevention, or diagnosis of disease. Along with *Drug Facts and Comparisons,* it includes unlabeled accepted uses. Among its organizational categories there is one, "Precautions To Consider," which includes drug interactions, diagnostic interference, and medical problems/contraindications. It includes a section on patient consultation including "Before Use," "Proper Use," "Precautions," and "Side/Adverse Effects—those needing medical attention and those that do not need medical attention." The standards (strength, quality, and purity) for drugs published in USP are recognized as official by the federal government and are enforceable by the FDA.
- **Advice for the Patient.** USP-DI also publishes this drug information in lay language. This text contains drug information prepared specifically for the consumer. It is sold only to health care professionals as a reference for the patient which may be placed in the physician's waiting room. Permission is given to photocopy monographs for patients if no charge is made to the patient for the monographs. Each drug monograph contains proper use directions and precautions to be observed among other topics. Also available are these same monographs printed as single-page leaflets on an assortment of 80 drugs. These are similar to the *AMA Patient Medication Instruction* sheets which use the USP database. Sections include "Uses of This Medicine," "Before Using This Medicine," "Proper Use of This Medicine," "Precautions While Using This Medicine," "Side Effects of This Medicine," and "Discontinuing This Medicine." These now are available for 83 drugs through USP. (They no longer are to be ordered from the AMA.) These leaflets would be especially useful when prescribing such drugs as anticoagulants, diuretics, nonsteroidal anti-inflammatories, and digitalis preparations. (For more information write: USP, 12601 Twinbrook Parkway, Rockville, MD 20852.)
- **Drug Evaluations.** This book is prepared by the professional staff of the American Medical Association, Department of Drugs, providing physicians and other health care professionals with unbiased information on the clinical use of drugs. It has been published for 20 years and it is updated every 3 years. It is available at a discounted price as a benefit of membership of the AMA.
- **DUET (Drug Use Education Tool).** These are pamphlets for a variety of drugs published by the American Academy of Family Practice. Available to members, this is one example of drug information available through specialty societies.
- **Medifile Cards.** These are blank cards which allow physicians to list all medications, including dosage. The patient carries this card, to be shown to other treating physicians or emergency personnel. These blank cards are available from the Medical Society of New Jersey at no charge.

placement and repair of mycotic cerebral aneurysm.

There were 26 files where the wrong antibiotic was given. There is the possibility that the wrong antibiotic may have been given because a culture and sensitivity test was not done, but this was not stated in these cases. What specifically was seen in these files either was a failure to followup on a culture and sensitivity report after ordered and obtained, or a failure to order the antibiotic which the culture and sensitivity report recommended. There were three patient deaths, one patient with severe brain damage, eight amputations, three cases of chronic osteomyelitis, and sterility of two teenage females as a sequalae to these infections.

There were 26 files where there was a failure to give antibiotics. In the majority of these files the patients had come to the emergency room for treatment of a laceration, or were patients with diabetes mellitus and being treated for foot ulcers or had incurred postoperative infections. There were six patient deaths, five above-the-knee amputations, three amputated fingers, one partial amputation of the sternum, and five other patients requiring additional surgeries and facing permanent partial disability.

Example: A 49-year-old patient was discharged from the hospital following coronary artery bypass surgery with a prescription for an antibiotic to treat persistent drainage from the incision. The patient was monitored by his internist. After five weeks of antibiotic therapy, there was no change in the condition of the draining incision, and the internist referred the patient back to the surgeon. The surgeon discontinued all antibiotics. The patient continued to be seen by the surgeon monthly for one year. The drainage from the incision persisted. No antibiotic was prescribed during this 12-month period. The patient eventually sought treatment from another physician who diagnosed osteomyelitis of the sternum. A partial sternectomy was performed; in addition, the patient required intravenous antibiotic therapy for several weeks.

★ There is additional morbidity and mortality from infections when physicians neglect to obtain culture and sensitivity tests from draining wounds and then fail to treat the infection with the appropriate antibiotic. When an apparent systemic infection is treated with antibiotics before obtaining a blood culture, the blood culture may yield a false negative result, leading to a delay in diagnosis and treatment. There were cases where there was no reevaluation when the patient's infection did not respond to the prescribed antibiotic. Of the total 73 files, there were only 2 files where an infectious disease specialist had been consulted.

H. Prescription of Medication To Treat Symptoms (indemnity paid, $3,397,105). There were 39 files in this category. In the majority of these cases, physicians prescribed medication to alleviate patients' complaints of pain. In each of these cases, with the symptom of pain absent or diminished through medication, the physician failed or delayed in diagnosing the patient's condition. In many of the 39 files, the prescription of medication masked the patient's condition and made the diagnosis more difficult. In this category, there were 16 patient deaths, 1 severely brain-damaged patient, and 2 patients whose future health is threatened. A few examples are presented for clarification.

Example: A three-month-old hospitalized infant was treated with acetaminophen (Tylenol®) for a temperature of 105°C. The physician suspected meningitis but did not continue with a diagnostic workup because the infant's temperature responded to the acetaminophen (Tylenol®). The physician thought that the infant was better; however, the child became worse later the same evening and died.

Example: A 19-year-old was treated with Percodan® in an emergency room. He was misdiagnosed as having gastroenteritis. He actually had acute myocarditis and pericarditis. The Percodan® masked his symptoms and he died two days later.

Example: A 35-year-old was treated with meperidine hydrochloride (Demerol®), hydroxyzine pamoate (Vistaril®), Combid® spansules, and Donnatal®. The patient had a ruptured appendix and peritonitis, but the analgesics had masked the pain and made the diagnosis more difficult.

★ In an attempt to alleviate patient discomfort, physicians have increased patient morbidity and mortality through the practice of prescribing medication to eradicate symptoms before establishing a diagnosis. By removing these clues to the patient's condition, the physicians found it more difficult to make a correct and timely diagnosis.

I. Generic Drugs (indemnity paid, $21,000). The issue of generic drugs is included here not because it reflects a trend, but to report that the prescription of generic drugs or the substitution for generic drugs produced only one claim. There was only one file involving a generic drug; the following is a summary of that incident.

A patient being treated for hypertension had a prescription for hydroflumethiazide (Diucardin®) filled through a mail-order pharmacy. The pharmacy erroneously filled the prescription with bishydroxycoumarin (Dicumarol®), an anticoagulant, labeled as hydroflumethiazide (Diucardin®). The patient developed retroperitoneal hemorrhage and required hospitalizations over a period of two months before the problem was identified. The patient had notified the physician that the pills did not look the same as the previous pills. The physician stated that he had no way of identifying the pills because they were generic. When the patient mentioned this a second time, and the physician could not find a cause for the coagulopathy, the physican sent a sample of the pills to the pharmaceutical company for identification. A jury found the insured 10 percent liable ($21,000 of the total $215,000 verdict). An article written in *Medical Economics,* on May 25, 1987, entitled "Generics Are Giving Me A Cheap Headache," describes a similar situation.

SUMMARY

MIIENJ has paid $30,144,636 in indemnity from 1977 through 1988 for medical malpractice suits arising from medication errors. A review of these files revealed that patients incurred death and serious morbidity, and that several specific behavior errors accounted for the majority of patient injury. Among the damages that occurred during that time period were 88 deaths, 15 patients with profound brain damage, 15 patients who alleged that they had become addicted to medications prescribed for pain, 10 patients who required amputations of limbs, and 12 patients who suffered some degree of hearing loss or decreased visual acuity. The predominant categories where insureds incurred difficulty were in disregarding patient allergies to specific drugs (acetylsalicylic acid (aspirin), penicillin and its derivatives); prescribing drugs without consideration of the patient's medical history; failing to monitor therapy with anticoagulants, nonsteroidal anti-inflammatory drugs, digitalis derivatives, theophylline, and aminoglycoside antibiotics; antibiotic therapy; and errors in the writing of prescriptions.

In order to reduce the number of patient injuries and accompanying medical malpractice suits from medication errors, the following suggestions are offered:

1. **Heed the patient's warning regarding drug allergies and prescribe a substitute drug, especially if the drug is aspirin or penicillin (and derivatives) or if the patient gives a history of having asthma.** If the patient gives a history of aspirin sensitivity, make certain the drug you are prescribing does not contain aspirin as one of its components. Often physicians stated that they were not aware that aspirin was contained in the drug they prescribed for patients with a documented allergy to aspirin. Question all patients regarding allergy to the drug you are considering prescribing. Ask if the patient has ever taken the drug before and if he/she has had any problems related to taking the drug.

2. **Maintain in the front of the patient's office record a current listing of all drugs which the patient is taking and include the date prescribed, refill dates, and date the drug was discontinued.** Also, include on this medication sheet drugs other physicians are prescribing and over-the-counter drugs the patient admits to taking. Indicate on the top of this sheet, along with the patient's name, a diagnosis, past medical history, and drug allergies. This may reduce the incidence of prescribing drugs that are contraindicated by the patient's history, prescribing drugs to which the patient is allergic, and prescribing an excessive amount of tranquilizers, hypnotics, and narcotics. It also may prompt the physician to re-evaluate the effectiveness of a drug and either consider a different diagnosis or a different drug.

A stamp, "Blood Test Needed," could be used to remind the physician of the need to monitor such drugs as diuretics, anticoagulants, digitalis preparations, nonsteroidal anti-inflammatory products, anticonvulsants, and certain antibiotics (aminoglycosides such as gentamycin, tobramycin, and amikacin which have been known to cause ototoxicity, neurotoxicity, and nephrotoxicity). This may help to prevent the fatalities and severe morbidity associated with toxic levels and blood-altering properties of these drugs.

3. **When antibiotic therapy is being considered to treat a draining wound or cavity, choose the antibiotic based on the result of a culture and sensitivity test.** Whenever possible, consult with an infectious disease specialist for treatment of the unusual, severe, or nonresponding infection.

4. **Make it a habit to consult a good reference before prescribing a drug for a patient.** The volume of new drugs and the existing older drugs available for patient treatment is colossal. No one can retain in his memory all the information necessary to ensure patient safety and the desired therapeutic effect. It is of interest that many of the severe medication errors involved the more common and older drugs. In addition to the *Physicians' Desk Reference (PDR)* which is provided at no cost to physicians by the drug companies, consideration should be given to additional resources (Table). Often *PDR* lacks information on older drugs.

5. **Consider the hospital or community pharmacist as a consultant.** Updated drug reference materials such as *Drug Facts and Comparisons,* USP-DI, and *Facts And Comparisons' Drug Interactions* are kept in pharmacies and pharmacy departments. Education for pharmacists now emphasizes their role as a provider of drug information. Clinical pharmacists with the degree of doctor of pharmacy (PharmD) are being found in increasing numbers in New Jersey hospitals. They are graduates of six or seven years of pharmacy training and have completed at least one year of residency. The pharmacist can be considered a source of information. ■

Submitted May 1989; Accepted August 1989

The Contemporary Alcoholic

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The contemporary alcoholic is younger and addicted to more drugs than ever before. The alcoholic under the age of 30 years old is addicted to marijuana, cocaine, benzodiazepines, barbiturates, and other drugs.

The use of drugs other than alcohol by alcoholics has been sufficiently prevalent for clinicians and researchers to record in the past. Alcoholics are using more drugs than ever before.[1-7] The importance of identifying drug use and addiction in alcoholic populations is crucial to clinical diagnosis, prognosis, and treatment. The formulation of research models for the etiology and natural history of abuse and addiction to alcohol must consider other drug use and addiction.

The contemporary alcoholic reflects a departure from the traditional alcoholic in pattern and frequency of other drugs used. Today's alcoholic is younger, usually starts with alcohol as the first drug, and progresses to other drug use rapidly and intensely. Most alcoholics under the age of 30 use at least one other drug, typically multiple drugs. The use of the other drugs frequently is addictive and sometimes has indistinguishable consequences from an alcohol addiction.[3,4]

Conversely, the majority of the drug addicts who are addicted initially to a drug other than alcohol later will develop an alcohol addiction. For these drug addicts, alcohol usually is not the drug of choice, but is used as an adjunct for the effects of a drug or as a substitute for a drug.[4,5]

PREVALENCE OF USE

An arbitrary cut-off between young and old alcoholics is made at 30 years of age to illustrate the epidemiology of drug use among alcoholics. The in-

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cidence of drug use by alcoholics decreases as age increases and reflects the pattern of drug use that began in the 1960s among the younger population.[3-6] A complete, and often cited, reference that illustrates the frequency of alcohol and drug use in young populations is a monitoring survey conducted annually since 1975 by the National Institute on Drug Abuse (NIDA). A nationally representative sample of high school seniors who are enrolled at the time of the survey is polled.

The lifetime use by high school seniors in 1986 of alcohol was 91 percent; marijuana, 51 percent; cocaine, 17 percent; other stimulants, 23 percent; and tranquilizers, 11 percent. The use in the most recent month for the same drugs was 85 percent, 38 percent, 13 percent, 13 percent, and 6 percent, respectively. Another national survey by NIDA samples households in the United States for drug use in all ages. Although similar figures are obtained for the young, the inverse relationship between age and other drug use among alcoholics is illustrated in this survey. Among the adults 26 years of age and older, the lifetime prevalence in 1985 for alcohol use was 90 percent; marijuana, 27 percent; cocaine, 10 percent; other stimulants, 8 percent; hallucinogens, 6 percent; and sedatives/tranquilizers, 12 percent.[5]

The Drug Abuse Warning Network (DAWN), recording visits to emergency rooms in the United States, has found that alcohol used with other drugs was cited more frequently than drugs used alone. This combination of alcohol and drugs accounted for 24 percent of all drug-related episodes in the emergency rooms for all ages, excluding those episodes related to alcohol alone, for which data were not collected.[6]

A national accounting of youths with alcohol and drug problems in the National Youth Poly-drug Study (NYPS) revealed that the mean number of drugs regularly used by the alcoholic youths was 4.4. Marijuana and alcohol were the most frequently used drugs on a regular basis, 86 percent and 80 percent, respectively, of the sample of 2,750 youths. Amphetamines had the third highest prevalence at 45 percent, followed by hashish, barbiturates, hallucinogens, and phencyclindim (PCP) at 42 percent, 40 percent, 40 percent, and 32 percent, respectively.[7]

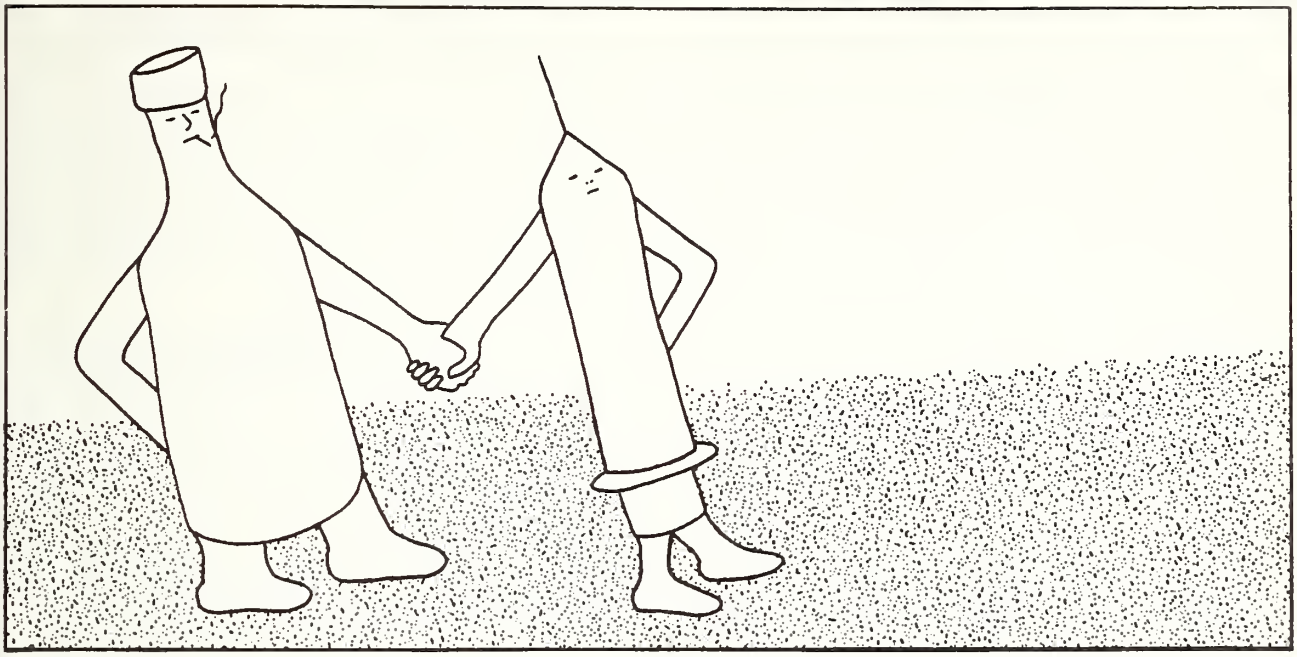
From 1930 through 1970, alcoholics' use of other drugs has been reported with regular frequency. As many as 46 percent of 1,340 alcoholic patients (of all ages in 17 New York alcoholism rehabilitation units) used drugs, often addictively, during the 30 days before entering treatment. The drugs most frequently used were minor tranquilizers, marijuana, sedatives, amphetamines, hallucinogens, and narcotics. Approximately 20 percent of the patients reported using two or more drugs in addition to alcohol. A comprehensive review examining 15,447 cases in 46 studies found 3,046 alcoholics who also were addicted to another drug, a 20 percent rate of drug addiction among alcoholics. Some of today's drugs were reported in the literature from the 1930s through the 1960s, i.e. barbiturates, opiates, benzodiazepines, organic solvents, and marijuana.[8,9]

In recent, large-scale studies of inpatient populations of adult and adolescent alcoholics and drug addicts in various treatment facilities, the number of cocaine addicts with the additional diagnosis of alcohol dependence was in the 70 to 90 percent range.[10,11] Similar studies of methadone and heroin addicts show rates of alcohol dependence between 50 and 75 percent.[12,13] Approximately 80 to 90 percent of cannabis addicts also are addicted to alcohol.[10,11] The prevalence of poly-drug use and addiction that includes alcohol is the rule for the contemporary drug addict. The mono-drug user and addict is a vanishing species in American culture.[12-14]

PATTERNS OF USE

Many studies that examine alcoholics separately from drug addicts indicate that alcohol is the first drug used, often addictively, by both the alcoholic whose primary drug of choice is alcohol and the drug addict whose primary drug of choice is marijuana or another drug other than alcohol.[15] Summarizing available studies, alcoholics over the age of 30 typically began drinking in adolescence and progressed to alcohol dependence in their 20s. A certain proportion began using cannabis (10 to 20 percent) in their adolescence. Another 10 percent began use of stimulants, including cocaine, amphetamines, and organic solvents, while 20 percent began use of sedative/hypnotics, predominately benzodiazepines, barbiturates, and meprobamates. Around 50 percent may continue their alcohol dependence without significant use of drugs in addition to alcohol.[8,9,14,16,17]

The alcoholic under the age of 30 has developed a different pattern. Over 80 percent of these alcoholics are addicted to at least one other drug, often more than one drug. A triad of alcohol, marijuana, and cocaine addiction is a regular occurrence among younger alcoholics being admitted currently to inpatient and outpatient facilities.[18] Typically, the younger alcoholic begins using alcohol in early teenage years, around 13 to 15, progressing to addictive use of alcohol by 15 to 16 years of age. A year or two after the onset of alcohol use, other drugs are tried, some addictively, that include marijuana and cocaine, followed by hallucinogens, benzodiazepines, and barbiturates. The pattern of cocaine use is changing dramatically, most notably by an earlier age of onset of use and high addiction rates. The skillful marketing techniques for the cheaper form of cocaine, "crack," have lured younger individuals to repetitive and often addictive use.[6,7,10,11,17]



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DIAGNOSIS

The dependence syndrome as defined in DSM-III-R is used to diagnose alcohol and drug dependence by utilizing the criteria of addiction, tolerance, and dependence. Investigations into the utility of the DSM-III-R criteria for diagnosis of the "dependence syndrome" also have confirmed these trends of multiple drug use that are occurring among alcoholics. Clusters of signs and symptoms conform to the criteria for a common dependence syndrome for alcohol and drugs, particularly, alcohol, opiates, and cocaine.[19]

The prevalence of multiple drug use by contemporary alcohol and drug addicts poses difficulties in accurate diagnosis. The identification of only alcohol use in a patient often is tenuous and misleading. Because denial is a part of the addictive process, an under-reporting and underestimation of other drug use is to be expected in a clinical interview, especially if only the alcoholic is interviewed. Corroborative sources increase the likelihood of obtaining a more accurate estimate of the total pattern and amount of alcohol and other drug use. These additional sources may be family, employer, legal agencies, and urine and blood testing for drugs.[20]

Information needed for diagnosis is difficult to obtain from the alcoholic, sometimes in even the most obvious cases. The criteria for addiction, including preoccupation, compulsive use, and relapse to alcohol and drugs, are boldly denied by many alcoholics and drug addicts who are actively using, and under the influence of, alcohol and drugs. Questions regarding the development of tolerance and dependence to alcohol and drugs are equally difficult to have answered adequately. Persistent pursuit of the patient by subsequent interviews and a knowledge of the natural history of alcohol and drug use and addiction often will yield satisfying results when trying to fully understand the clinical dynamics of the alcoholic.[20]

Multiple drug use will determine the clinical presentation of the acute and chronic intoxication syndromes in the alcoholic. A mixture of signs and symptoms produced by alcohol and drugs may confuse the clinical picture and make the diagnosis of a specific type of intoxication difficult. Psychiatric syndromes that are produced by alcohol and, particularly, by drugs, in the acute and chronic periods of intoxication, are not easily differentiated from psychiatric syndromes from other etiologies.

TREATMENT

The complete knowledge of all drug use in the alcoholic has important implications in the treatment of drug and alcohol withdrawal in the acute detoxification period, as well as in relapse prevention. Different drugs, including alcohol, may require individualized detoxification schemes because cross tolerance and dependence do not exist for all the drugs. The physiological withdrawal from alcohol is treated with benzodiazepines, whereas the anergia, depression, and craving seen in cocaine withdrawal are treated by bromocriptine.[21,22] The persistent delusional and hallucinatory symptoms from PCP are ameliorated by neuroleptic medication. The withdrawal syndrome from opiates is treated either with clonidine or methadone.[23,24] Furthermore, the protracted withdrawal from hallucinogens and other stimulants in the alcoholic may require prolonged pharmacological intervention and supportive care.

The nonpharmacological modalities for long-term treatment of alcohol dependence are affected by other drug use. Individualized education and support are indicated for specific drugs such as cocaine and opiates. However, the principles of the abstinence-based treatment program that includes Alcoholics Anonymous will work for the alcoholic who has additional drug addictions. The similarities among the alcohol and multiple drug addictions are greater than the differences, so that recovery by poly-drug alcoholics in self-help groups such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) is not only possible, but is more the rule than the exception. Even individual psychotherapy should involve the core of both alcohol and drug addiction and their combined effects on the mind and behavior.

The risk of relapse to the drug of choice, whether it be cocaine, opiates, marijuana, or alcohol, is heightened by the use of any drug, including alcohol. The need to abstain from all drugs, including alcohol, is necessary, with few exceptions.[10-15,17-19]

GENETICS

The theoretical implications are interesting to consider, especially because of the genetic studies of the recent decades. Twin, adoption, familial, and high-risk studies have demonstrated a significant genetic predisposition to alcoholism. Identical twins are more concordant for alcoholism than fraternal twins. The biological parent of an adoptee is a more important determinant of alcoholism than the foster parent who reared the adoptee. Alcoholism runs in families. More than 50 percent of alcoholics have a family history of alcoholism. A child of an alcoholic is more likely to have certain neurophysiological and behavioral manifestations in common with other offspring of alcoholics than with matched controls without an alcoholic parent.[25]

Corresponding studies for the prevalence of alcohol dependence in the families of cocaine and opiate addicts and other drug users have been performed. In one study, the rate of diagnosis of alcohol dependence in first- or second-degree relatives in the families of 263 cocaine addicts was greater than 50 percent; more than 132 cocaine addicts had at least one relative with alcohol dependence by DSM-III-R criteria.[26]

Opiate addicts with a parental history of alcoholism more frequently were diagnosed with concurrent alcoholism. In one study, opiate addicts (n=638) had at least one parent with alcohol dependence in 21.3 percent of the families. Opiate addicts with the diagnosis of alcohol dependence (n=216) had a 27.0 percent rate of parental alcoholism, and opiate addicts (n=422) without parental alcohol dependence had a 12.5 percent rate of alcohol dependence in their families. Among the opiate addicts with alcohol dependence, those with parental alcoholism had more severe problems with alcohol.[27]

A study of young alcohol users revealed a higher rate of alcohol-related problems and drug use if a family history of alcoholism was present in first- and second-degree relatives. Young alcohol users without, or with fewer, relatives with alcoholism had a lower rate of alcohol-related problems and drug use.[28]

These findings compare favorably with the familial studies of alcoholism. Alcoholics have at least a 50 percent probability for a positive family history of alcoholism. The high rate of alcohol dependence among cocaine and opiate addicts and drug users and their families suggests a generalized vulnerability that may have a genetic contribution to alcohol and drug abuse. The genetic predisposition to alcoholism may overlap or share transmission with cocaine, opiates, and other addictions.

THE NEUROBIOLOGY OF ADDICTION

The concurrence of alcohol and drug addiction provides further theoretical considerations for a neurobiological basis for addiction. The loss of control that underlies all the criteria for addictive behavior is manifested by a drive to pursue, use, and resort to alcohol and drugs repetitively and spontaneously. The substrate for the mechanisms for the drive in addiction reside in the limbic system.[29] The limbic structures include the amygdalae and septal areas for mood, the hippocampi for memory association, and the drive states for hunger, libido, and thirst. The reward center also is represented among the limbic structures in the lateral hypothalamus.[30]

The important features of addiction are subserved by the functions in the limbic system. Alcohol and drugs profoundly alter mood and drive states. An association between alcohol and drugs and the drive states may be reinforced by the reward center and recorded in memory by the hippocampi. The drive states may entrain the use of alcohol and drugs in a fashion similar to their autonomous control over their other functions. The pursuit and use of drugs and alcohol become as easily stimulated and spontaneous as eating, drinking, and sexual behavior.[31]

Cocaine may activate the limbic system through stimulation of the dopamine transmission.[32] The reward system consists of neurons located in the lateral hypothalamus that traverse the median forebrain bundle to synapse on dopamine-containing neurons in the ventral tegmentum. These dopamine neurons send fibers into the nucleus accumbens (mesolimbic pathway) and the limbic cortex (mesocortical pathway). Neurons with opiate receptors for endorphins and enkephalins are located on the dopamine neurons in the ventral tegmentum.

Alcohol appears to have a widespread effect on many of the neurotransmitter systems in the limbic system and reward system. All of the drugs of addiction, including alcohol, affect mood, libido, memory, and appetite. These drugs also may stimulate the mesolimbic area that may be responsible for hallucinations and delusions. All the drugs suppress frontal lobe function to produce impairment in judgment and insight characteristic of these addictions.[30,31]

SUMMARY

Multiple drug use occurs in alcoholics in an age-dependent relationship. The younger the onset of alcoholism, the more likely is additional drug use. Drugs used by alcoholics, in decreasing order of frequency, are marijuana, cocaine, and other stimulants, phencyclidine, benzodiazepines, barbiturates, and hallucinogens. Evaluation of intoxication and treatment or detoxification in alcoholics should always include consideration of other drugs. Multiple drug use in alcoholics does not preclude the short- or long-term treatment that traditionally is available for alcoholics, such as programmatic treatment and AA and NA and psychotherapy. The existence of poly-drug addiction in alcoholics and of alcohol dependence in families of drug addicts and alcoholics suggest a common genetic vulnerability to alcoholism and drug addiction. ■

Submitted: April 1989; Accepted: June 1989

REFERENCES

1. Sokolow L, Welte J, Hynes G, Lyons J: Multiple substance abuse by alcoholics. *Br J Addict* 76:147-158, 1981.

2. Mirin SM, Weiss RD, Michael J: Alcohol abuse in patients dependent on other drugs. *Psychiatr Ann* 12:430-433, 1982.

3. Refroe CL, Messinger TA: Street drug analysis. An 11-year perspective on illicit drug alteration. *Sem Adolescent Med* 1:247-257, 1985.

4. Jekel JF, Allen DF: Trends in drug abuse in the mid-1980s. *Yale J Biol Med* 60:45-52, 1987.

5. Clayton RR: The epidemiology of alcohol and drug abuse among adolescents. *Adv Alcohol Subst Abuse* 4:69-87, 1985.

6. Meltzer HF, Kreek MJ: Multiple drug abuse patterns and medical consequence, in *Psychopharmacology: The Third Generation of Prognosis.* New York, NY, Raven Press, pp. 1597-1604, 1987.

7. Santo Y, Farley EC, Friedman AS: Highlights from the National Youth Poly-drug Study, in, *Drug Abuse Patterns among Young Poly-drug Abusers and Urban Appalachian Youths.* U.S. Dept. of Health and Human Services, Publication No. 80-1002, 1-16, 1980.

8. Freed EX: Drug abuse by alcoholics: A review. *Int J Addict* 8:451-473, 1973.

9. Sokolow L, Welte J, Hynes G, Lyons J: Multiple substance abuse by alcoholics. *Br J Addict* 76:147-158, 1981.

10. Miller NS, Gold MS: The diagnosis of alcohol dependence and cannabis dependence among cocaine addicts (submitted for publication), 1988.

11. Miller NS, Millman RB, Keskinen S: The prevalence of alcohol dependence among cocaine addicts in an inpatient population (submitted for publication), 1988.

12. Liebson F, Bigelow G, Flainer R: Alcoholism among methadone patients. A specific treatment method. *Am J Psychiatry* 130:483-485, 1973.

13. Birrhari B: Alcoholism and methadone maintenance. *Am J Drug Alcohol Abuse* 1:79-87, 1974.

14. Carrol JFX, Santo Y, Hannigan PC: Description of the total client sample, analysis of substance use patterns and individual program descriptions, chapter III, in, Gardner SE, *National Drug/Alcohol Collaborative Project Issues in Multiple Substance Abuse.* Research Monograph Services, NIDA DHEW Publication No. (ADM) 80-957, 1980.

15. Gold MS: *Drugs of Abuse: A Comprehensive Series for Clinicians. Vol. 1. Marijuana.* New York, NY, Plenum Medical Book Company, 1989.

16. Kanaia J, Kofoed L: Drug use by alcoholics in outpatient treatment. *Am J Drug Alcohol Abuse* 10:529-534, 1984.

17. Smith DE: Cocaine-alcohol abuse: Epidemiological, diagnostic, and treatment considerations. *J Psychoactive Drugs* 18:117-129, 1986.

18. Gold MS: *The Facts About Drugs and Alcohol.* New York, NY, Bantam Books, 1987.

19. Kosten TR, Rounsaville BJ, Babor TF, et al.: Substance-use disorders in DSM-III-R evidence for the dependence syndrome across different psychoactive substance. *Br J Psychiatry* 151:834-843, 1987.

20. Miller NS: A primer of the treatment process for alcoholism and drug addiction. *Psychiatry Letter* 5:30-37, 1987.

21. Extein IL, Gold MS: The treatment of cocaine addicts: Bromocriptine or desipramine. *Psychiatr Ann* 18:535-537, 1988.

22. Dackis CA, Gold MS: Bromocriptine as treatment of cocaine abuse. *Lancet* 1:1151-1152, 1985.

23. Miller NS, Gold MS, Millman RB: PCP: A dangerous drug. *Am Fam Pract* 38:215-218, 1988.

24. Tennant F: Clinical diagnosis and treatment of postdrug impairment syndrome. *Psychiatry Letter* 6:47-51, 1988.

25. Goodwin DW: Alcoholism and genetics: The sins of the fathers. *Arch Gen Psychiatry* 42:171-174, 1985.

26. Miller NS, Gold MS, Belkin BM, Klahr AL: Family history and diagnosis of alcohol dependence in cocaine dependents (in press), 1988.

27. Kosten TR, Rounsaville BJ, Kleber HD: Parental alcoholism in opioid addicts. *J Nerv Mental Dis* 173:461-468, 1985.

28. Schuckit MA, Sweeney S: Substance use and mental health problems among sons of alcoholics and controls. *J Studies Alcohol* 48:528-534, 1987.

29. Gold MS, Dackis CA: New insights and treatments: Narcotics and cocaine addiction. *Clin Ther* 7:6-21, 1985.

30. Lader M: The psychopharmacology of addiction. New York, NY, Oxford University Press, 1988.

31. Miller NS, Dackis CA, Gold MS: The relationship of addiction, tolerance, and dependence: A neurochemical approach. *J Substance Abuse Treatment* 4:197-207, 1987.

32. Dackis CA, Gold MS: New concepts in cocaine addiction: The dopamine depletion hypothesis. *Neuroscience Biobehavioral Rev* 9:469-477, 1985.

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Whipple Operation Revisited

DAVID A. SPAIN, MD
RALPH S. GRECO, MD

The Whipple procedure traditionally is associated with an operative mortality of 20 to 25 percent. As a result, percutaneous and endoscopic techniques have been advocated to alleviate symptoms in patients with periampullary carcinoma. Now, dramatic reductions in operative mortality rates have been reported. Since radical pancreaticoduodenectomy is the only treatment for cure, a re-evaluation of the role of this procedure is warranted.

Modern pancreatic surgery began in 1935 when Whipple introduced a two-stage radical pancreaticoduodenectomy for the treatment of carcinoma of the ampulla of Vater.[1] This was modified to a single-stage procedure by Trimble in 1941.[2] At that time, the fear of a pancreatic-intestinal anastomosis was so great that the pancreatic duct was simply ligated. This led to pancreatic fistula formation in up to 70 percent of patients.[3] During the next 30 to 40 years, despite advances in surgical techniques, septic complications from leakage of the pancreatic-jejunal anastomosis were frequent. The high operative morbidity and mortality rates and poor long-term survival in periampullary cancers caused surgeons in the 1960s and 1970s to call for abandonment of this procedure. In 1970, Crile reported that survival in patients with biliary bypass was greater than those with resection.[4] However, this study was limited to patients with adenocarcinoma of the head of the pancreas and a palpable mass, and, therefore, does not apply to all patients with periampullary tumors.

Radical pancreaticoduodenectomy offers the only chance for cure in patients with periampullary cancers, which now are the fourth leading cause of death from cancer.[5] Despite advances in diagnostic capabilities, it often is difficult to distinguish the origin of the four tumors found in the periampullary region: pancreatic, ampullary, common bile duct, and duodenal. Five-year survival rates vary drastically depending on the site of origin, from as low as 3 percent for pancreatic cancer to as high as 60 percent for ampullary cancer,[6-8] but laparotomy may be the only way to identify a more favorable lesion. In order to justify the more frequent use of this procedure, morbidity and mortality rates must be decreased. Recent reports from Johns Hopkins University, UCLA Medical Center, and other institutions have reported operative mortality rates as low as 1 to 6 percent, well below the oft-quoted 25 percent.[7,9] These reports and experience with a re-

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cent patient prompted us to review radical pancreaticoduodenectomy at Robert Wood Johnson University Hospital. Unfortunately, the traditional view that the Whipple procedure carries a prohibitive mortality has remained with many internists, gastroenterologists, radiologists, and surgeons. A nonoperative approach using percutaneous or endoscopic techniques to alleviate symptoms has been advocated for an ever-increasing number of patients. A case report illustrates the limitations of the nonoperative approach and the advantages of an aggressive surgical attitude towards patients with periampullary tumors.

Table 1. ***Presenting signs and symptoms.***

	Number	Percent
Jaundice	11	92
Bilirubinuria	7	58
Diarrhea/Acholic Stool	7	58
Weight Loss	6	50
Abdominal Pain	4	33
Pruritis	4	33
Abnormal liver function tests	1	8.3

CASE REPORT

A 59-year-old white female, with a history of asthma and atrial arrhythmias, was seen initially at another hospital for vague right upper quadrant abdominal pain associated with anorexia and weakness. A diagnosis of biliary colic was made, and when her symptoms subsided, she was discharged from the emergency room. She felt well for two weeks and then noticed the gradual onset of jaundice and a 15-pound weight loss. She was admitted to the hospital for evaluation. A computed tomography (CT) scan of the abdomen was performed and reported to show an extensive mass in the head of the pancreas, which was felt to be unresectable. An endoscopic retrograde cholangiopancreatography (ERCP) was attempted, but the ampulla could not be identified. A large mass impinging on the second portion of the duodenum was found. A biopsy was positive for adenocarcinoma. She was transferred to the Robert Wood Johnson University Hospital Surgical Service for evaluation.

Physical examination revealed an icteric woman with normal vital signs. Her lungs were clear and the cardiac rhythm regular. The abdomen was soft with slight right upper quadrant tenderness. A 6 cm gallbladder was palpable in the right upper quadrant. The liver span was 8 cm. The rectal examination was normal and the stool negative for blood.

Laboratory data were significant for a total bilirubin of 8.0 mg percent with a direct of 6.0 mg percent, and elevation of all liver enzymes including an alkaline phosphatase of 640 U/L (normal 0 to 75 U/L). A visceral arteriogram revealed a right hepatic artery originating from the superior mesenteric artery and displacement of the superior mesenteric vessels by the tumor mass. Encasement of a minor inferior pancreaticoduodenal artery branch was seen as well.

Table 2. ***Operative data.***

	1980-1988 (n=12)	1980-1984 (n=6)	1985-1988 (n=6)
Operative Time	8 hr 14 m	9 hr 20 m	7 hr 8 m
Estimated Blood Loss	2010 cc	2400 cc	1620 cc
Intraoperative Transfusions	3.9 units	4.6 units	3.3 units
Morbidity	58.3%	66.7%	50.0%
Mortality	0%	0%	0%

At this point, the impression was that the patient had a pancreatic head cancer that appeared unresectable. Physicians involved in her care offered several treatment modalities to the patient, including percutaneous biliary drainage. We strongly felt this patient should have an exploratory laparotomy and possible radical pancreaticoduodenectomy, as this offered the only chance for cure. The patient agreed and underwent a Whipple procedure with an operative time of four hours and 14 minutes. Estimated blood loss was 500 cc and no transfusions were required. Pathologic examination of the specimen revealed a well-differentiated adenocarcinoma of the ampulla of Vater (Figure). The margins were free of tumor and all nodes were negative. The patient's postoperative course was uneventful and she was discharged on postoperative day 10.

RESULTS

Twelve patients have undergone elective radical pancreaticoduodenectomy at Robert Wood Johnson University Hospital from 1980 to 1988. All were performed for carcinoma. There were 9 males and 3 females with an average age of 62 years (range 54 to 73 years). The oldest patient now is 76 years old and alive and well without evidence of disease. Presenting signs and symptoms are listed in Table 1. The average duration prior to presentation was 5 weeks (range 1 to 12 weeks). Seven patients had pancreatic tumors and 3 patients had negative nodes. There were 2 patients with ampullary and 1 patient with common bile duct cancer, all with negative nodes. Both patients with primary duodenal cancer had positive nodes.

Operative data for all patients are presented in Table 2. The cases are divided into two time periods

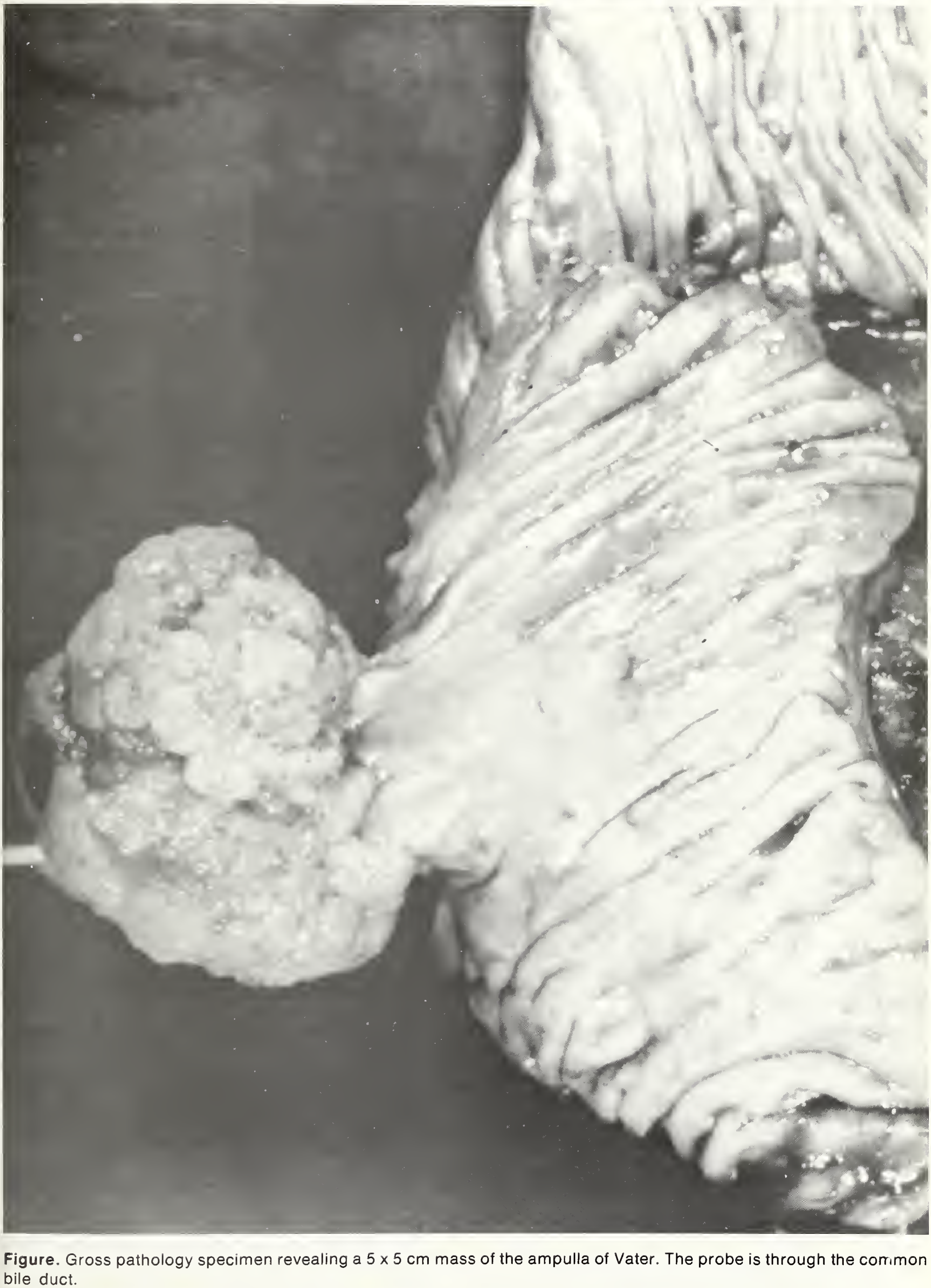

Figure. Gross pathology specimen revealing a 5 x 5 cm mass of the ampulla of Vater. The probe is through the common bile duct.

for comparison. There were no perioperative deaths in either group and all patients were discharged home. During the last four years, operative time, estimated blood loss, and the number of intraoperative transfusions all have decreased. Morbidity remained high at 50 percent but decreased from 66.7 percent for the previous time period. Five patients had no complications and were discharged between 10 and 24 days. Three patients (33 percent) had the major complication of an anastomotic leak with intra-abdominal abscess: two patients were drained percutaneously and one patient required a second laparotomy. Three patients developed postoperative diabetes mellitus, but easily were controlled with modest doses of insulin.

DISCUSSION

The Whipple procedure remains one of the most complex and difficult intra-abdominal operations performed. Historically, the operative mortality rates have been 20 to 25 percent.[10] Because of this and the poor long-term prognosis for pancreatic cancer, there has been a great hesitancy to subject patients to this procedure. Recent developments in endoscopy and interventional radiology have provided nonoperative methods to alleviate symptoms in patients with periampullary cancers. This philosophy, however, ignores the well-documented decrease in operative mortality rates to 3 to 10 percent.[7,9,11] Grace and Longmire from UCLA had an operative mortality rate of 6 percent in 96 patients, and this had further decreased to 2 percent in the last five years of their study.[7] In 1984, Trede reported an operative mortality of 1.1 percent in 91 consecutive patients and found that the resectability rate also had increased from 5 to 21 percent during the study.[11] Advances in perioperative care, including intensive care unit monitoring and total parenteral nutrition, and improved treatment of perioperative complications through interventional radiology may account for these changes. Cameron believes the most important reason for the decline is that more patients are being sent to experienced pancreatic surgeons at regional centers.[12]

Overall survival in pancreatic cancer appears to be increasing, although the reasons for this are unclear.[9] Cameron reported an actual five-year survival of 19 percent in all patients with pancreatic cancer undergoing a Whipple procedure; however, lymph node involvement was critical.[12] Five-year actuarial survival was 1 percent in node positive patients, and 48 percent in those with negative nodes. Three of our patients fall into the latter category. In 1986, the UCLA Medical Center reported a five-year actuarial survival after resection of 52 percent in common bile duct cancer, 60 percent in duodenal cancer and 62 percent in ampullary cancer.[7] Therefore, 6 of 12 patients in our study would be expected to have a 40 to 60 percent chance of surviving five years. In particular, the patient presented would have been poorly served with a nonoperative approach or simple biliary bypass.

Clearly, the prevailing attitude toward radical pancreaticoduodenectomy must be re-evaluated. Furthermore, nonoperative approaches must be re-evaluated as well, with specific regard to the quality of survival. There is one point upon which all specialists dealing with this problem agree: patients who are denied operations will die of their disease. Patients now may be offered a potentially curable operation with an acceptable mortality. Although complications still are common and the overall prognosis is variable, we must not become pessimistic. Radical pancreaticoduodenectomy offers the only chance to cure these patients. An aggressive surgical approach should be undertaken in all patients with periampullary lesions unless there is unequivocal evidence of metastatic disease. ■

Submitted: May 1989; Accepted: July 1989

REFERENCES

1. Whipple AO, Parsons WB, Mullins CR: Treatment of carcinoma of the ampulla of Vater. *Ann Surg* 102:763-779, 1935.

2. Trimble IR, Parsons JW, Sherman CP: A one-stage operation for the cure of carcinoma of the ampulla of Vater and head of the pancreas. *Surg Gynecol Obstet* 73:711-727, 1941.

3. Papachristou DN, D'Agistino H, Fortner JG: Ligation of the pancreatic duct in pancreatectomy. *Br J Surg* 67:260-262, 1980.

4. Crile G Jr: The advantage of bypass operation over radical pancreaticoduodenectomy in the treatment of pancreatic carcinoma. *Surg Gynecol Obstet* 130:1049-1053, 1970.

5. Silverberg E: American Cancer Society. *Cancer Statistics* 36:9-16, 1986.

6. Connolly MM, Dawson PJ, Michelassi F, et al.: Survival in 1001 patients with carcinoma of the pancreas. *Ann Surg* 206:366-373, 1987.

7. Grace PA, Pitt HA, Tompkins RK, et al.: Decreased morbidity and mortality after pancreaticoduodenectomy. *Am J Surg* 151:141-149, 1986.

8. Hayes DH, Bolton JS, Willis GW, Bowen JC: Carcinoma of the ampulla of Vater. *Ann Surg* 206:572-577, 1987.

9. Crist DW, Sitzman JV, Cameron JL: Improved hospital morbidity and mortality after the Whipple procedure. *Ann Surg* 206:358-365, 1987.

10. Shapiro TM: Adenocarcinoma of the pancreas: A statistical analysis of biliary bypass versus Whipple resection in good risk patients. *Ann Surg* 182:715-721, 1976.

11. Trede M: The surgical treatment of pancreatic carcinoma. *Surgery* 97:28-35, 1985.

12. Cameron JL: Current status of the Whipple operation for periampullary carcinoma. *Surgical Rounds* 77-87, 1988.

Thomas Jefferson University

Tradition and Heritage

MORRIS H. SAFFRON, MD

This ponderous and unwieldly volume (edited by Frederick B. Wagner, Jr, MD, Lea and Febiger, Philadelphia and London, 1989) contains the most detailed account of any medical school in the United States. Written and in large part edited by a Jefferson professor of surgery who also is University historian, the work is a composite by many hands, including specialists in various fields as well as collateral administrators. This essay will concern itself primarily with the 19th century history of the school as it relates to the development of medical education in this country.

Jefferson College, the first literary institution founded west of the Alleghenies, was chartered in 1802 during the administration of our third president who showed his pleasure at the name by donating books and money to the school. As a result, a tenuous relationship with the University of Virginia seems to have persisted for a considerable period of time. However, it was not until 1824 that a medical school located in Philadelphia was engrafted on the parent college. Two years later, despite strenuous efforts on the part of the University of Pennsylvania to prevent such a move, the state Legislature authorized the new school to grant the medical degree. The animus between the two schools persisted for many years and as late as the 1830s, it was stated that "the faculty of the University of Pennsylvania could take no notice of anything that emanated from the Jefferson School." The prime mover in the stirring events connected with the foundation of Jefferson was the surgeon George McClellan, himself a Pennsylvania graduate. He was assisted by three other faculty members, one of whom was the noted John Eberle, an early pediatrician whose *Treatise on the Practice of Medicine* ran through no less than six editions.

The 1830s, the so-called Jacksonian era, witnessed a general lowering of educational standards with the concomitant rise of a number of poorly organized proprietary medical schools, many of which experienced a rapid demise. Jefferson itself suffered from many vicissitudes, including a difficulty in retaining faculty members as well as financial problems before reaching a period of relative calm. Among the prominent teachers of these early days were: botanist William P. C. Barton, professor of materia medica, whose *Flora of North America* is highly regarded and Nathan R. Smith, a surgeon who already had founded two medical schools in Vermont and at Dartmouth before coming to Jefferson. Another transient faculty member was the remarkable medical pioneer, Daniel Drake, who taught at several schools and was the founder of two others in Ohio. He is noted as author of the classic *Diseases of the Interior Valley of North America,* the first textbook on the subject. Still another peripatetic who touched base at Jefferson was the Scotsman Grenville S. Pattison, a famous anatomist who soon wandered off to help found the medical school at New York University.

At this period, the class of 1835 produced two graduates whose names still are revered in the history of medicine: Carlos J. Finlay, the Cuban physician who apparently was the first to attribute the

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cause of malaria to the bite of a mosquito, and J. Marion Sims, whose skill in the repair of vesicovaginal fistulae brought him the title, father of American gynecology, and a statue in New York's Central Park. Somewhat later, another famous graduate was Edward R. Squibb, who devised a method of freeing ether from its impurities and went on to establish the famous pharmaceutical house which still bears his name.

The year 1838 saw the final separation of Jefferson Medical School from the parent college. The ensuing year was one of turmoil and dissension ending with the dismissal of the founding father, George McClellan, and the selection of a basically new faculty. Prominent among the appointees were Robley Dunglison, professor of medicine, and Charles D. Meigs, professor of obstetrics and gynecology. Both of these men were prolific writers and their numerous publications helped bring increased recognition to the "second" Philadelphia school. Indeed, it was the highly cultured Meigs who obtained a somewhat dubious notoriety for himself by his vigorous opposition to the Holmes-Semmelweiss theory of postpartum contagion induced by the uncleanliness of the obstetrician. A rigorous traditionalist, Meigs later opposed the use of anesthesia during childbirth. In 1847, at the founders meeting of the American Medical Association, it was a Jefferson professor of medicine, Nathaniel Chapman, who was named first president by acclamation.

We now are approaching the antebellum period and the arrival from Louisville of Samuel D. Gross as professor of surgery. Gross succeeded Thomas D. Mutter whose name is perpetuated in the famous anatomical museum now housed in the College of Physicians of Philadelphia. During his long and productive tenure (1856-1882), Gross became recognized as dean of surgery in America, and the numerous accolades he received on his many trips here and abroad naturally brought permanent lustre to the institution which he represented. The famous painting by Thomas Eakins, "The Gross Clinic," is recognized as a masterpiece of American painting. Incidentally, the connection between the artist, who insisted on emphasizing the value of anatomical studies to his pupils, and the nearby medical school was very close, with the result that the numerous portraits of faculty members done by Eakins remain among Jefferson's most prized possessions.

The Civil War brought a period of hardship to Jefferson as many southern students withdrew to join the Confederate forces. Gross immediately produced a "Manual of Military Surgery" which promptly was pirated by the southerners and soon became a veritable vade mecum for medical officers on both sides of the struggle. By the end of the war, Jefferson had become firmly established as a leading school of medicine in this country. Among the notables on the faculty we can mention only a few: John W. Brinton, a founder of the Army Medical Museum and collaborator with William H. Hammond in the publication of the voluminous, *Medical and Surgical History of the War of the Rebellion;* William W. Keen, a prolific writer on anatomy and surgery noted for performing the first successful operation for brain tumor; and John P. da Costa whose work on surgery went through ten editions. In other fields, we may mention the unrelated though equally famous clinician, Jacob M. da Costa, whose *Medical Diagnosis* long held supremacy in the field; Jacob da Silva Solis-Cohen, a pioneer in the specialty of laryngology; Hobart A. Hare, whose work on therapeutics was reprinted no less than 21 times; and S. Weir Mitchell, often called the father of neurology in this country, who is equally revered for his eminence in the field of the American novel.

Jefferson sailed through the Flexner probe of 1910 to 1911 with flying colors, and as we approach recent times, the names of faculty leaders in medicine become ever more frequent: Elmer H. Funk who expanded Trudeau's sanatorium treatment for tuberculosis; Martin E. Rehfuss, the gastroenterologist whose name is linked with his tube for gastric analysis; Charles E. Sajous and Francis X. Dercum, pioneers in the development of the science of endocrinology; Jay F. Schamberg, the dermatologist who collaborated in the manufacture of arsphenamine when this substance could not be obtained from Germany during World War I; George E. de Schweinitz, famous ophthalmologist whose *Diseases of the Eye,* first published in 1892, ran through ten editions; and Chevalier Jackson, an innovator in the field of bronchoscopy who improved instruments used in removing foreign objects from the food and air passages.

As previously indicated, the latter half of this volume is concerned with the development of the various specialties. Written in each instance by the current head of the department, these introductory accounts should prove of considerable interest to future scholars. Unfortunately, in the case of the older disciplines such as surgery and medicine, there is a noticeable degree of overlapping and repetition which occasionally mar this otherwise splendid work. At times, identical photographs are reproduced. A number of portraits seems to be legion and in the case of Samuel D. Gross, I counted no less than four, with two duplicates of the sword carried by his son during the Civil War. In spite of such laudable, if frequently overwhelming, efforts to attain absolute completeness, this book certainly will prove to be a landmark in the field, and one which future institutional historians will wish to explore and emulate. ■

Malignant Fibrous Histiocytoma

Induced by Thorium

MARK T. DIMARCANGELO, DO
ERIBERTO T. DAVID, MD
KOSON KURODA, MD

Thorium dioxide is a deleterious substance that was employed as a vascular contrast medium during the early 20th century. Our report entails a unique neoplastic complication of thorium administration.

We report the interesting and unusual history of a patient exposed to the contrast medium, thorium dioxide, during the second decade of her life. The patient then developed an extraosseous malignant fibrous histiocytoma of her lower extremity during the sixth decade of life. To our knowledge, this is the first report of this rare, latent complication of thorium exposure.

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CASE REPORT

A 57-year-old woman was admitted to Cooper Hospital/University Medical Center, Camden, in November 1987, with a mass involving the right thigh, accompanied by edema of the entire lower extremity. At age 11, the patient sustained a severe laceration to the right thigh, that was repaired surgically. At age 14, she developed painful right lower leg varicosities. She underwent a venogram with thorotrast (thorium dioxide), at which time there was soft tissue extravasation of the thorotrast into the right thigh and pelvis. The patient could not recall the site of the contrast injection. She subsequently had two venous ligation procedures to treat the varicosities.

Six years prior to the present admission, the patient had a frontal meningioma excised. Approximately 24 months before this admission, a mass developed in the right thigh, that was diagnosed as a malignant fibrous histiocytoma (MFH). The neoplasm was resected and followed by radiation therapy (6500 rads) to the surgical bed.

Within 24 months, the thigh mass recurred and outpatient chemotherapy with Adriamycin® and Methotrexate® was initiated. The tumor, however, was refractory to this therapy, necessitating hospitalization.

On this admission, the plain film examination of the abdomen and abdominal computed tomography (CT) imaging demonstrated sequestration of thorotrast within the spleen and the lymph nodes (Figures 1 and 2). As might be expected, the spleen was noted to be diminished in size secondary to radiation-induced atrophy. Radiographic examination of the right hemipelvis and thigh demonstrated thorotrast within the musculature and adjacent soft tissues as well as within regional lymph nodes (Figure 3). Arteriography, preliminary to surgery, revealed tumor blush within the right thigh mass (Figure 4).

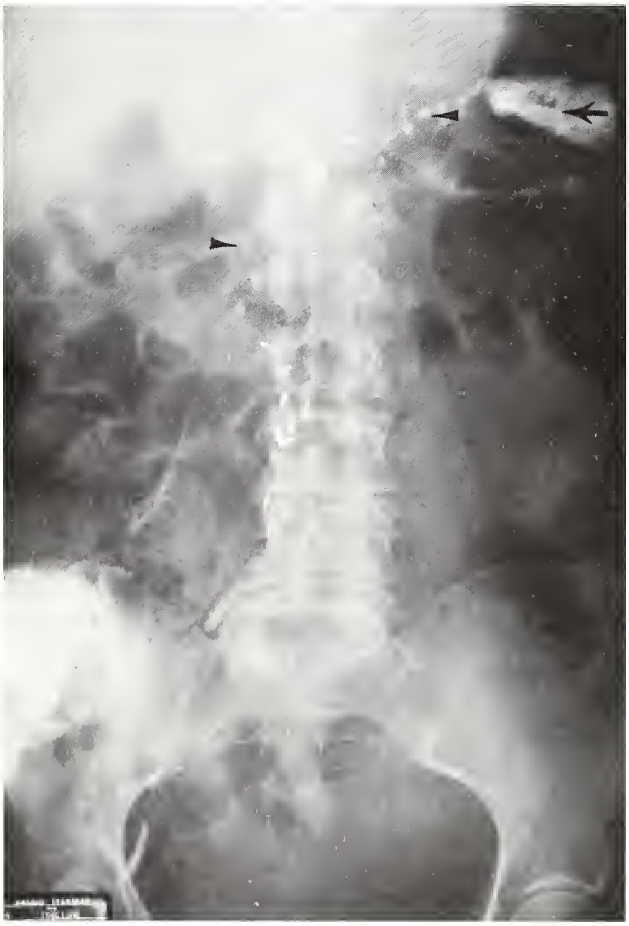


Figure 1. The plain abdominal radiograph shows thorotrast within the spleen (arrow) and multiple lymph nodes (arrowheads).

A total right lower extremity amputation (right hip disarticulation) was done. Surgical recovery was uneventful and there was no evidence of other neoplastic process at the time of discharge. A third primary neoplasm has been discovered in the upper lobe of the right lung; histology has yet to be established, but it is thought to be a carcinoma.

PATHOLOGICAL FINDINGS

Gross pathological analysis of the amputated thigh revealed an oval, circumscribed, rubbery, white and pale gray tumor measuring 14 x 11 x 6 cm. The mass involved the skeletal musculature and extended into the subcutaneous fat. Osseous involvement was not found, but there was impingement upon the femoral vessels and evidence of central tumor necrosis. The microscopic examination again demonstrated findings consistent with malignant fibrous histiocytoma of the storiform pleomorphic variety. Thorotrast granules were present in the microscopic sections.

DISCUSSION

Thorium dioxide (thorotrast) is a radioactive substance that predominantly emits alpha particles. This agent was utilized as a contrast medium after its introduction in 1928.[1] Thorium-232, present in thorotrast, has a biological half life of 400 years and, when introduced into the body, it is sequestered by the reticuloendothelial system. The alpha particles are responsible for high radiation dosage to these

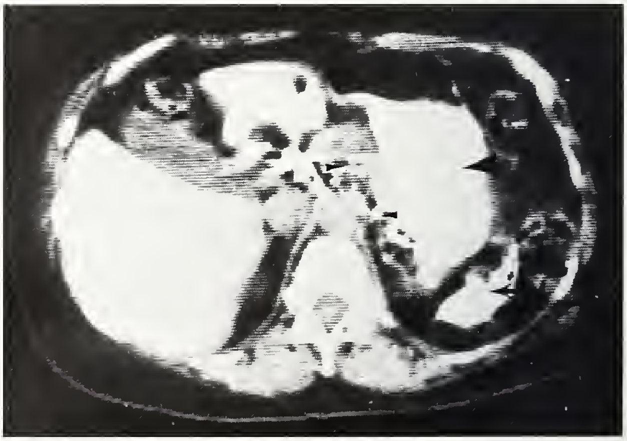


Figure 2. Computed tomogram of the upper abdomen confirms the presence of thorotrast in the spleen (arrow) and lymph nodes (small arrowheads). Radiopaque contrast is present within the stomach (large arrowhead).

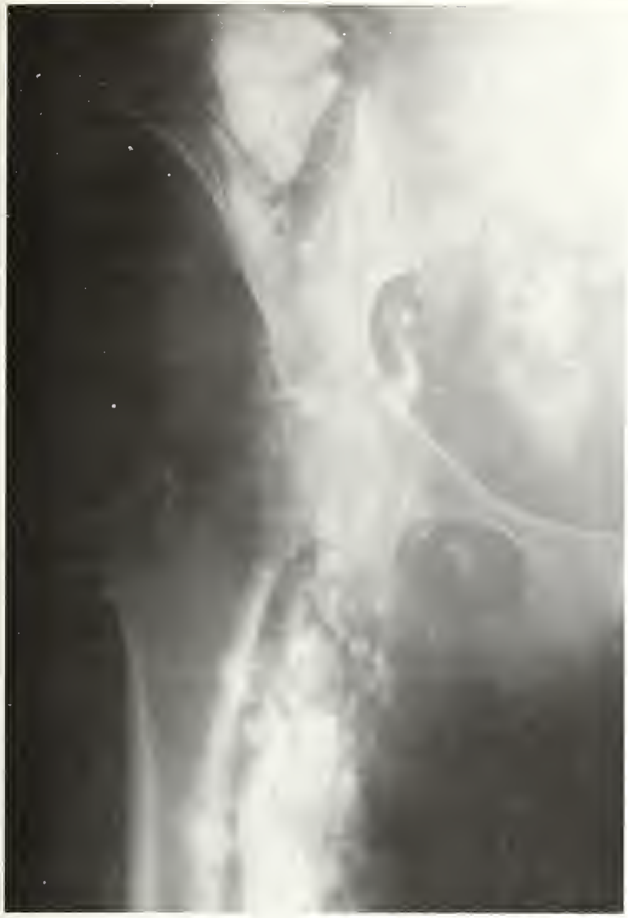


Figure 3. Plain film of the right hemipelvis and upper thigh depicts thorium within the soft tissues and lymph nodes.

tissues and can culminate in carcinogenesis. After the first report in 1947 of neoplasia related to thorotrast administration,[2] the angiographic use of this deleterious material was abandoned. Many papers since have described the malignancies associated with thorotrast. The types of tumors cited in the literature include various hepatic and splenic lesions,[1] meningioma,[3] leukemia,[4] lung carcinoma,[5] renal cell carcinoma,[6] mesotheliomas, and sarcomas of the bone and soft tissues of the neck.[7] No reports were found of thorium-induced MFH of the lower extremity. It is interesting to note that, although MFH usually is osseous in origin, this patient's neoplasm was totally extraosseous in location.

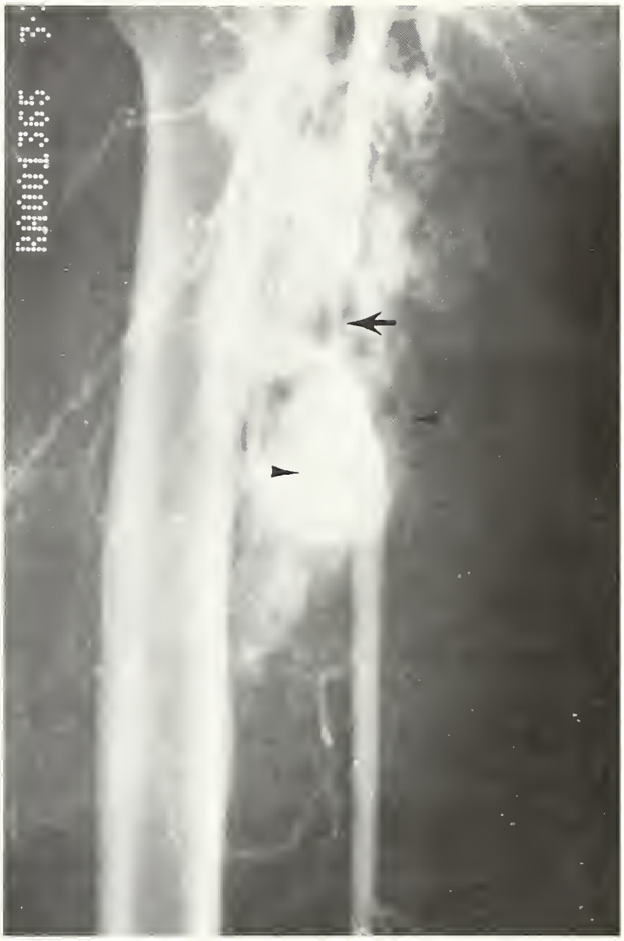


Figure 4. Arteriogram reveals smooth narrowing of the proximal portion of the superficial femoral artery secondary to adjacent mass effect (arrow). Tumor blush and neovascularity also are present (arrowheads).

A thigh malignancy occurring in an area where there had been thorotrast deposition 21 years earlier is consistent with thorotrast-induced neoplasia. As systemic thorotrastosis was noted on radiography and CT of the abdomen, it is probable that the three primary neoplasms in this patient (meningioma, MFH, and lung carcinoma) can be attributed to the administration of thorium dioxide. ■

Submitted: April 1989;
Accepted: September 1989

REFERENCES

1. Levy D, Rindsberg S, Friedman A, et al.: Thorotrast-induced hepatosplenic neoplasia: CT identification. *Am J Roent* 146:997-1004, 1986.

2. Kaplan A, Teng S, Koo A: CT Recognition of thorotrast-induced intracranial and lumbar arachnoiditis. *Am J Neuro Rad* 5:323-325, 1984.

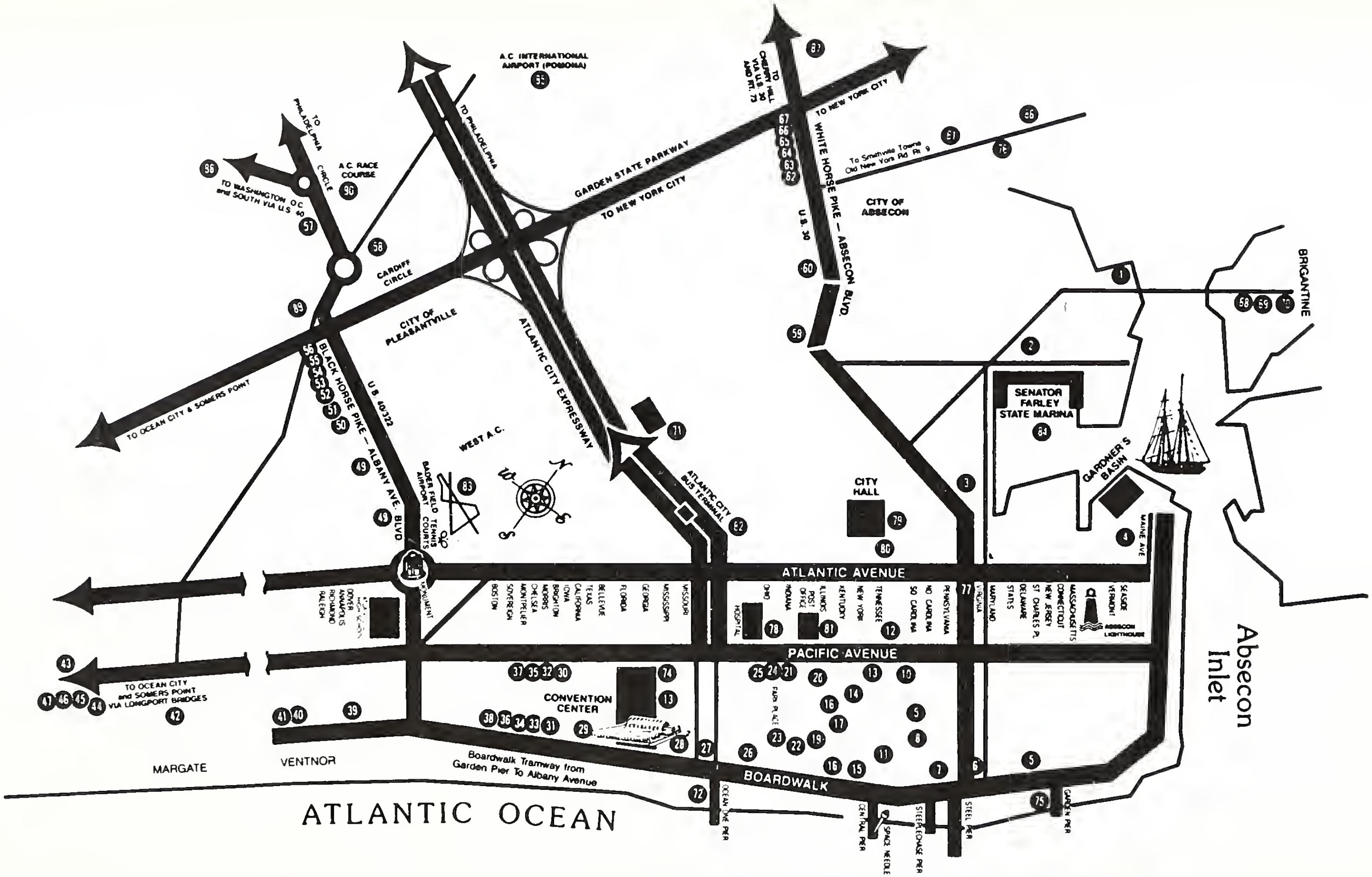
3. Kyle R, Oler A, Lasser E, Rosomoff H: Meningioma induced by thorium dioxide. *N Engl J Med* 268:80-82, 1963.

4. Boggs D, Kaplan S: Cytobiologic and clinical aspects in a patient with chronic neutrophilic leukemia after thorotrast exposure. *Am J Med* 81:905-910, 1986.

5. Sadahira Y, Mori M, Nakamoto S, et al.: Lung cancer in a thorotrast-administered patient. *Acta Pathol Jpn*, 35:1467-1473, 1985.

6. Kauzlaric D, Barmeir E, Lusieti P, et al.: Renal carcinoma after retrograde pyelography with thorotrast. *Am J Roent* 148:897-898, 1987.

7. Silpananta P, Illescas F, Sheldon H: Multiple malignant neoplasms 40 years after angiography with thorotrast. *Can Med Assoc J* 128:289-292, 1983.



GREATER ATLANTIC CITY HOTELS/MOTELS/POINTS OF INTEREST

1. Harrah's Marina
2. Trump Castle
3. Admiral's Quarters**
4. Radisson Flagship Resort**
5. Showboat
6. Trump Taj Mahal*
7. Resorts International
8. Barbizon-Catalina
9. Carolina Crest
10. Quality Inn
11. Trinidad
12. Fiesta
13. Envoy
14. Econo Lodge Boardwalk
15. Atlantic Palace**
16. La Renaissance**
17. Casino Beach
18. Madison House
19. Continental
20. Bala
21. Midtown Motor Inn
22. Sands
23. Claridge
24. Best Western—Atlantic City
25. Royal Inn
26. Bally's Park Place
27. Caesars Atlantic City
28. Trump Plaza
29. Atlantis
30. Ascot
31. TropWorld
32. Dunes
33. Days Inn—Atlantic City
34. Diplomat
35. International
36. Ocean Club**
37. El Greco
38. Bally's Grand
39. Enclave Suite Resort**
40. Oceanaire (Ventnor)
41. Mayfair By-The-Sea (Ventnor)
42. White Sands (Margate)
43. Residence Inn (Somers Point)
44. Impala Motel (Ocean City)
45. Santa Barbara (Ocean City)
46. Port-O-Call (Ocean City)
47. Crossings Motor Inn (Ocean City)
48. Airport Motor Inn
49. Best Western Inn at Golf & Tennis World
50. Comfort Inn—West Atlantic City
51. Hampton Inn West
52. Pleasantville Motor Inn
53. Sheraton Inn
54. Comfort Inn Victorian
55. Whittier Inn
56. Days Inn—Pleasantville
57. Inn of the Dove (Cardiff)
58. Red Carpet Inn (Cardiff)
59. Howard Johnson Hotel
60. Comfort Inn North
61. Marriott's Seaview Golf Resort
62. Travel Lodge
63. Econo Lodge
64. Budget Host Inn
65. Hampton Inn Hotel
66. Days Inn Absecon
67. Travel Inn
68. Islander (Brigantine)
69. La Sammana (Brigantine)
70. The Sea Gull (Brigantine)
71. Atlantic City Rail Terminal and Site Of New Convention Center
72. Shops On Ocean One
73. Atlantic City Convention Center
74. Atlantic City Convention & Visitors Bureau
75. Atlantic City Art Center
76. Natl. Wildlife Refuge & Noyes Museum
77. Gordon's Alley Shops
78. Hospital
79. City Hall
80. Public Library
81. Post Office
82. Bus Station
83. Bader Field Airport
84. Sen. Frank S. Farley State Marina
85. Atlantic City International Airport
86. Historic Smithville & Village Greene
87. Renault Winery
88. Historic Wheaton Village
89. Shore Mall/Boscovs
90. Atlantic City Race Course & Hamilton Mall/Macy's

*Under construction/Casino Hotel Pending, N.J. Licensure
**Condo

HOUSING APPLICATION

224th ANNUAL MEETING MEDICAL SOCIETY OF NEW JERSEY MAY 6-9, 1990

Select the hotel of your choice. Mail the entire form with one night's deposit to that hotel.

THE SANDS HOTEL, CASINO & COUNTRY CLUB (Headquarters Hotel)

INDIANA AVE. AT BRIGHTON PARK, P.O. BOX 28, ATLANTIC CITY, NJ 08404
RESERVATION DEPARTMENT 1-800-257-8580

(Please Print)

Name ____________________

Address ____________________

City ____________________ State ____________ Zip ____________

Home Phone ____________ Business Phone ____________

Sharing With ____________________

Date of Arrival ____________ Time ____________

Date of Departure ____________ Time ____________

A one-night deposit (equivalent to room rate) is required with all reservation requests. Please send check or money order payable to the **SANDS** or complete the following:

American Express No. ____________ Expiration Date ____________

SCHEDULE OF RATES SUBJECT TO 12% TAX

☐ SINGLE **$75.00** ☐ One-Bedroom Suite **$225.00** ☐ Two-Bedroom Suite **$300.00**

☐ DOUBLE **$75.00 (Reservations must be received prior to April 6, 1990)**

Check-out time is 12 Noon. Rooms may not be available for check-in until after 3 p.m. Check-in time on Sundays is 6 p.m. FORTY-EIGHT (48) HOURS NOTICE OF CANCELLATION is required for a full refund.

PARKING: FREE PARKING TO REGISTERED GUESTS. One car per room.

☐ Check if Official Delegate County ____________

* *

CLARIDGE CASINO HOTEL

INDIANA AVE. AT THE BOARDWALK, P.O. 448, ATLANTIC CITY, NJ 08404
RESERVATION DEPARTMENT (609) 340-3434
NJ ONLY 1-800-582-7676

(Please Print)

Name ____________________

Address ____________________

City ____________________ State ____________ Zip ____________

Home Phone ____________ Business Phone ____________

Sharing With ____________________

Date of Arrival ____________ Time ____________

Date of Departure ____________ Time ____________

A one-night deposit (equivalent to room rate) is required with all reservation requests. Please send check or money order payable to the **CLARIDGE** or complete the following:

Card # ____________ Type ____________ Exp. Date ____________

SCHEDULE OF RATES SUBJECT TO 12% TAX

☐ SINGLE **$75.00** ☐ One-Bedroom Suite **$225.00** ☐ Two-Bedroom Suite **$300.00**

☐ DOUBLE **$75.00 (Reservations must be received prior to April 5, 1990)**

Check-out time is 12 Noon. Rooms may not be available for check-in until after 3 p.m. Check-in time on Sundays is 6 p.m. FORTY-EIGHT (48) HOURS NOTICE OF CANCELLATION is required for a full refund.

PARKING: FREE PARKING TO REGISTERED GUESTS. One car per room.

☐ Check if Official Delegate County ____________

NOTEBOOK

TRUSTEES' REPORT

A regular meeting of the Board of Trustees was held on November 19, 1989, at the executive offices of the Medical Society of New Jersey. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Frank R. Begen, MD . . . Noted that a contribution was made to the MSNJ Medical Student Loan Fund in memory of Doctor Begen, and received unanimously the following memorial resolution:

Whereas, the Almighty has chosen to call from us our beloved colleague, Frank R. Begen, MD; and

Whereas, as a fellow and officer of this Society, Doctor Begen served its members and the people of New Jersey; and

Whereas, he demonstrated the attributes of a concerned caring father, husband, and physician, and will be missed by all; now therefore be it

Resolved, that the Medical Society of New Jersey expresses its profound sorrow at the death of Dr. Begen and extends its sympathy to his family; and be it further

Resolved, that this Resolution be spread upon the minutes of this meeting, and a copy thereof presented to his family in heartfelt sympathy.

Report of the President . . .
(1) Conference of Presidents . . . Reported that the Conference was well attended, and will continue to be used as a forum for updating the leadership of the physician community on current issues of the Society.
(2) Medical Books for China International Foundation . . . Will encourage membership to participate in this project to collect used medical books for China.
(3) JEMPAC . . . Noted that Drs. Anthony P. Caggiano and Hormoz M. Minoui will serve with Dr. Hirsch on the Nominating Committee as Dr. Ryan will not seek reappointment as chairman; and, noted that a number of trustees have joined JEMPAC.
(4) President's Page . . . Noted that Dr. Hirsch, in his column in the December 1989 issue of *NEW JERSEY MEDICINE,* responded to a letter that expressed a contrary viewpoint about political action.
(5) Unified Membership in AMA . . . Heard Dr. Hirsch's comments on the MSNJ policy that AMA membership should be encouraged but that it should be voluntary.
(6) AMA Physicians' Assistance Program . . . Noted that a resolution is being introduced calling for the AMA to continue funding and maintaining an impaired physicians' program.
(7) AMA Interim Meeting . . . Unanimously carried the request to formulate a resolution calling for the AMA to begin, at an appropriate point, to hold interim meetings in Washington, DC.
(8) News Media Items . . . Noted three news items: availability of copies of Mr. Maressa's response to the editorial entitled, "The E.T. Answer to Doctor Bills"; commendation for the recent MSNJ advertisement, "Doctor's Medicare Fees"; and referred to the Council on Public Relations a public relations campaign for the elderly to have their personal physician review their medications, as done by Essex County Medical Society.
(9) Immunizations for Children . . . Requested the Essex County Medical Society to send their concerns regarding immunization schedules to the New Jersey Academy of Pediatrics for review and report.
(10) AIDS Legislation . . . Referred a letter from Congressman William Dannemeyer (seeking endorsement of the Public Health Response to AIDS Act of 1989 establishing certain eligibility requirements in the program of grants to the states for counseling and testing with respect to AIDS and for other purposes) to the Task Force on AIDS for consideration and report.
(11) AMA Leadership Conferences . . . Noted that ten members will attend this Conference to be held on February 24-26, 1990, in Phoenix, Arizona.

Report of Executive Director . . .
(1) MSNJ Paid Memberships . . . Noted that as of October 1989, paid memberships were 7,457, and observed that as the effects of the special assessment begin to decline, membership again will assume a favorable trend. Also, noted the list of 314 members who did not pay the special assessment will be published in *NEW JERSEY MEDICINE.*
(2) Financial Statements . . . Reviewed and approved the financial statements for the months of September and October 1989.
(3) State Board of Medical Examiners . . . Noted two significant changes in N.J.A.C. 13:34-6.5: if the patient or a subse-

quent treating health care professional is unable to read the treatment record, either because it is illegible or prepared in a language other than English, the licensee shall provide a transcription at no cost to the patient; and the licensee shall not refuse to provide a professional treatment record on the grounds that the patient owes the licensee an unpaid balance, if the record is needed by another health care professional for the purpose of rendering care.

(4) Medicare Transition . . . Filed a request with SBME regarding the refusal of HCFA to honor SBME's major surgery rule (defining a procedure in which an opening is made into any of the major body cavities as major surgery requiring an assisting physician); and noted that the Pennsylvania Blue Shield Provider 800 line will be discontinued as of December 31, 1989, but MSNJ will submit a request that the line be re-established.

(5) Litigation Reports . . . Reviewed the following litigation: interrogatories have been served and notices of deposition are being prepared and a case management conference has been scheduled in the suit against the insurance commissioner over his failure to fund the Medical Malpractice Reinsurance Association deficit in a fair and lawful practice; request has been filed with the EPA for a stay of their fee collection format (members have been advised to complete the registration form but not to pay the fee); heard that SBME will file a brief challenging the Board of Physical Therapy in two areas: the right of the therapist to examine a patient without a prior physician referral and the right of the therapist to alter a physician prescription without the physician's approval; awaiting a trial date for in re Sinha involving a medial licensure action; and MSNJ versus PRO case is pending in federal district court, and a trial date in June appears likely.

(6) *Membership Directory* . . . Noted that the supplement to the *Directory* has been published and distributed.

Specialty Reports . . . Received reports from Stanley S. Bergen, Jr, MD (UMDNJ); Michael B. Grossman, DO (State Board of Medical Examiners); and the New Jersey Hospital Association.

Academy of Medicine of New Jersey . . . Noted that Dr. Leighton E. Cluff is the recipient of the Edward J. Ill Award and Arline Schwartzman is the recipient of the Citizen Award for 1990.

Task Force on AIDS . . . Approved the following recommendations:

That the Board of Trustees submit a letter to the Governor's office requesting that a strong, centralized interagency task force (with physician membership) be established to aggressively attack the burgeoning AIDS epidemic in New Jersey.

That the Medical Society of New Jersey, through the Council on Legislation, develop legislation requiring compulsory HIV testing and counseling for all existing prisoners.

Unfinished Business: S-3429—Commissioner of Health . . . Voted to actively oppose S-3429 (this bill deletes the requirement for a medical license to be held by the commissioner of health).

New Business: New Jersey Physicians in Home Care Awards Program . . . Voted to decline endorsement of this program, as MSNJ has not specifically endorsed other awards in the past.

Correspondence . . . Received a letter from David I. Knowlton, acting commissioner of health, responding to concerns raised by the Committee on Medical Aspects of Sports in light of the issue covered by A-1734 (the bill requires random drug testing of school athletes before participation in events); and referred the letter addressing the issue of the need for uniform criteria among state-certified utilization review organizations from Commissioner of Health Molly Coye to the Committee on Utilization Review Systems for its review. ☐

UMDNJ NOTES

The University of Medicine and Dentistry of New Jersey (UMDNJ) broke ground October 26 at its Newark campus for a $55 million medical office complex and parking garage. The eight-level medical office complex will allow UMDNJ to expand clinical services and educational programs. The building and adjacent 1,031-car parking facility will occupy the Bergen Street-12th Avenue corner of the campus.

The medical office complex will house the faculty practice services of UMDNJ-New Jersey Medical School and UMDNJ-New Jersey Dental School. Some 300 faculty physicians and dentists will provide a wide range of health-care services from the facility.

Designed as a full-service ambulatory care facility, the medical office complex will provide a comprehensive array of outpatient services including a same-day surgery center, imaging center, and rehabilitation unit. In addition, the complex will consolidate several services and features on the Newark campus, including: quarters for The Eye Institute of New Jersey; quarters for the Stone Center of New Jersey, a lithotripsy (kidney stone therapy) unit run jointly by UMDNJ and Saint Barnabas Medical Center, Livingston, a UMDNJ affiliate; a University Center comprising a conference facility, and dining and fitness centers open to UMDNJ faculty, staff, and students; the Employee/Student Health Center; and space for complementary commercial opportunities, such as a coffee shop, newsstand, and phar-

[redacted]

macy/medical equipment shop.

For the first time, New Jersey students can receive doctoral level training in public health without leaving the state. Doctoral degrees in public health now are offered through two new programs jointly administered by UMDNJ and Rutgers, the State University of New Jersey. The doctor of philosophy (PhD) program in public health is for students interested in academic careers furthering basic knowledge and theory on the health effects of environmental and occupational conditions. The doctor of public health (Dr PH) program trains students to apply their knowledge to specific problems such as setting priorities for cancer research or providing health services for hazardous substance workers.

UMDNJ has received a new federal grant of almost $1.6 million to launch the state's first federally funded regional AIDS Education and Training Center. One of only 15 in the nation, the Center will provide comprehensive training programs consisting of courses and workshops aimed at all segments of the health care professions.

The Center is funded by a three-year $1,586,784 grant from the Health Resources and Services Administration of the Department of Health and Human Services. Administered by UMDNJ's Office of Continuing Education, it is an outgrowth of UMDNJ's Center for AIDS Education, established in 1988 to centralize education programs and attract funding to create a statewide resource.

An innovative peer-mentoring program to smooth the way for first-year minority group dental students has been started at UMDNJ-New Jersey Dental School, Newark. This year, 22 black and Hispanic freshmen have been teamed with upperclass student-mentors in the Peer Initiative Program. The student mentors guide the freshmen in such areas as obtaining tutors and working out study plans for difficult courses. They also provide general information about dental education and the dental school. The Peer Initiative Program is believed to be one of the first of its kind at a dental school in the nation.

Congratulations to: Dr. Donald Louria, a leading public health expert at UMDNJ, who received the major public health award of the New Jersey Public Health Association; and William R. Walsh, Jr, executive vice-president of finance and treasurer of the Robert Wood Johnson Foundation, who received the 1989 Distinguished Service Award from the Melvin H. Motolinsky Research Foundation. ☐ Stanley S. Bergen, Jr, MD

1990 MSNJ ANNUAL MEETING

Saturday, May 5, 1990

3:30 p.m.	Board of Trustees' Meeting
7:00 p.m.	Officers' Cocktail Reception and Dinner

Sunday, May 6, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
10:00 a.m.	Educational Program
11:00 a.m.	Exhibits Open
1:00 p.m.	House of Delegates
3:30 p.m.	Reference Committee Meetings

Monday, May 7, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates (Election)
12:00 noon	Golden Merit Award Ceremony and Reception
1:00 p.m.	Professional Liability Program (MIIENJ)
2:45 p.m.	Reference Committee Meetings
5:00 p.m.	JEMPAC Political Forum
5:45 p.m.	JEMPAC Wine and Cheese Reception
6:30 p.m.	Somerset County Medical Society

Tuesday, May 8, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates
1:30 p.m.	House of Delegates
2:00 p.m.	Exhibits Close
6:30 p.m.	Inaugural Reception and Dinner

Wednesday, May 9, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	General Session
1:00 p.m.	Board of Trustees' Meeting

MSNJ AUXILIARY

One of the major accomplishments of the American Medical Association Auxiliary (AMAA) is its longstanding commitment to health education, particularly its sponsorship of juvenile/adolescent health and drug abuse programs.

The MSNJ Auxiliary recently presented a health symposium, "Protect Their Future." The session, attended by educators from high schools and colleges across the state, included discussions on helmet safety, head injury and trauma, and anabolic steroid abuse.

Barbara Repetti, from the Association of Retired Citizens in Union County, and Pat Cone, RN, from the University of Medicine and Dentistry of New Jersey, both addressed the issue of head trauma caused by bicycle accidents and the necessity for cyclists of all ages to wear safety helmets.

According to Mrs. Repetti, a bicyclist is injured four times each hour of each day and nearly 1,300 die yearly. Children under 15 years of age account for 600 of all bicycle deaths. Of these deaths, 75 percent are caused by head injury. Bicycle injuries account for more than one-half million emergency room victims. One third of all victims of bicycling accidents treated in emergency rooms have head injuries, as do two-thirds of all patients with bicycle injuries admitted to the hospital. Even in a minor accident, a child has a 50/50 chance of hitting his head. Each year 6,000 children are hospitalized due to bike-car accidents. And because bicycle riding is so popular—111 million riders in the United States—injuries are increasing.

Ronald D. Grossman, MD, physician for the United States Olympic Medical Committee and a member of the drug testing crew, and Pat Croce, PT, trainer for the Philadelphia Flyers and the 76ers, spoke on anabolic steroid abuse. Anabolic steroids, derivatives of the male hormone, testosterone, increase protein synthesis, which combined with proper diet and training, produce an increase in body mass, lean muscle tissue, and overall strength.

Dr. Grossman warned the audience that anabolic steroids have filtered down to junior high, high school, and college sports. He emphasized that children must learn the real and potential risks involved; for example, anabolic steroids affect the body's normal hormonal balance and cause dangerous side effects ranging from impotence and sterility, to liver cancer, heart disease, psychosis, and death. There also is pervasive psychological and physical addiction to anabolic steroids. Teachers can identify students using anabolic steroids in several ways: rapid weight gain—15 to 30 pounds in one or two months; development of acne, particularly on the back; great behavioral changes—overtly hostile, ready to explode, even to hurt someone.

Pat Croce continued the discussion, including information on the aspects of fitness and the side effects of steroid use. He cautioned that using drugs to improve athletic performance undermines one of the most basic notions of sports—the value of honesty, hard work, and discipline. To stop drug abuse in sports, he emphasized the need for drug testing, appropriate education, and laws designating anabolic steroids as controlled substances. ☐ Marion Geib

AMNJ UPDATE

The Board of Trustees of the Academy of Medicine of New Jersey has named the 1990 recipients of the awards presented at the Academy's Annual Awards Dinner on Wednesday, May 23, 1990, held at the Chanticler in Short Hills.

Leighton E. Cluff, MD, of Princeton, will receive the Edward J. Ill Award "presented annually to that physician of New Jersey who merits recognition by the Academy for distinguished service as a leader in the medical profession." Recent recipients have included Drs. James Todd, Arthur Krosnick, Leon Smith, Alfred Alessi, Stanley Bergen, Palma Formica, Paul Hirsch, Richard Reynolds, Ervin Moss, and James Oleske.

Dr. Cluff is president of the Robert Wood Johnson Foundation. His leadership of that Foundation has been instrumental in maintaining and advancing its position of preeminence in the advancement of the health of this country through support of highly focused and imaginative projects. Many of these projects strike to the very core of the problems of health care delivery to underserved populations and the problems of the interface between the practice of medicine and the changing social fabric of our society.

The Academy's Citizen's Award is "presented annually to that citizen or group of citizens of New Jersey who merit recognition by the Academy for distinguished service in the interest of the health and welfare of the community at large." The 1990 Citizen's Award has been granted to Arline Schwartzman of Highland Park. Recent recipients include Richard J. Hughes, former governor of New Jersey; Alan Sagner, past-chairman of the Port Authority of New York and New Jersey; Drs. Herman and Anne Somers; Congressman James Courter; Malcolm Borg, publisher of the *Bergen Record;* Mary Strong of the Citizens' Committee on Biomedical Ethics; Assemblyman Chuck Hardwick; and attorney Paul Armstrong.

Mrs. Schwartzman exhibits the spirit of effective volunteerism. She has served as president of the Auxiliary of the Robert Wood Johnson University Hospital and has served on their Board of Trustees (and its predecessor) since 1965. For the past five years, she has been the chairperson of the Professional Affairs Committee which has dealt with all aspects of medicine, ethics, and the regulation of hospital practice. She is truly dedicated to making New Jersey a better place to live for its residents and giving those residents a better chance to be healthy.

We are pleased to announce that Lewis Coriell, MD, a member of the Medical Society of New Jersey, was selected by an academy of prestigious New Jerseyans to receive the Clara Barton Medical Service Award. The award was presented at the Fourth Annual Governor's Jersey Pride Awards Program held on Thursday, January 4, 1990, at Princeton's McCarter Theatre. The award is sponsored by the Academy and the American Red Cross. This project is part of a major statewide effort by Governor Kean to improve the image of New Jersey and to recognize New Jerseyans who have accomplished many great and important advances in a wide variety of fields. A total of 11 specific fields was recognized at the formal ceremony. ☐ Frederick B. Cohen, MD, President

LEGISLATIVE BULLETIN

The accompanying list presents, for your information and reference, the official position of the Medical Society of New Jersey regarding bills currently in the Legislature. As further bills of medical interest are introduced, they will be considered by the Society and supplemental bulletins will be supplied, indicating the Society's position.

Positions. The Society has adopted the following regular range of official positions concerning proposed legislation:

ACTIVE SUPPORT: All-out support for the measure.

ACTIVE OPPOSITION: All-out opposition for the measure.

CONDITIONAL APPROVAL: To indicate that the approval of the Society is conditional, subject to elimination of the unsatisfactory elements of the bill that are pointed out.

APPROVAL: Commended as satisfactory, but not actively supported.

DISAPPROVAL: Rejected as unsatisfactory, but not actively opposed.

NO ACTION: Considered, but not regarded as significant or relevant to the proper interest of the Society.

Senate/Assembly (Active)

S-722-Codey—Mental Health Coverage. Requires health insurers (hospital service corporations) to provide coverage for mental illnesses. **Active Support.**

S-723-Codey—Mental Health Coverage. Requires health insurers (medical service corporations) to provide coverage for mental illnesses. **Active Support.**

S-724-Codey—Mental Health Coverage. Requires health insurers (commercial group health) to provide coverage for mental illnesses. **Active Support.**

S-725-Codey—Mental Health Coverage. Requires health insurers (commercial individual health) to provide coverage for mental illnesses. **Active Support.**

S-726-Codey—Mental Health Coverage. Requires health insurers (HMOs) to provide coverage for mental illnesses. **Active Support.**

S-727-Codey—Mental Health Coverage. Requires health insurers (health service corporations) to provide coverage for mental illnesses. **Active Support.**

S-3440-Codey—Generic Substitution/Prescription Blank Change. Changes prescription forms to facilitate use of generic drugs. **Active Opposition,** filling out the new prescription format would require more time for physicians, the probability of forgetting to write the required words to override generics was greater when using a blank form and, therefore, the new format would not be in the best interest of patients.

S-3494-Zane—Unemployment Compensation and Disability Benefits. Exempts physicians who are independent contractors from employment and disability taxes. Clarifies an ambiguity in the current law. **Active Support.**

S-3549-Lynch—Optometric Use of Drugs. Permits optometrists to use drugs for diagnostic and treatment purposes. **Active Opposition,** optometrists are not medical doctors and, therefore, should not be given the mandate, via legislation, to administer drugs. If the wrong medication is prescribed, what appears to be a simple problem could develop into a destructive process of the eye in a very short period of time. The bill is shortsighted in attempting to provide less expensive care to the general public to the detriment of their health.

A-4259-Naples—Medical Records. Would require that records be "furnished upon request to the patient and/or his duly authorized representative immediately." **Active Opposition,** this situation is adequately covered under existing regulation and could not be implemented in the form stated in the bill.

Senate/Assembly (Monitor)

S-2939-Van Wagner—Emergency Services. Appropriates $1.5 million to the Department of Health to be used for EMS training and equipment. **Approved.**

S-3104-Lipman—AIDS. Makes AIDS or HIV sensitivity reportable to the Department of Health and provides for confidentiality. **Action Deferred,** pending review of the Task Force on AIDS of the Assembly amendments to **S-3104.**

S-3236-Rice—AIDS. Requires that persons convicted for using controlled dangerous substances shall be tested for AIDS and HIV sensitivity. **Action Deferred,** pending reconsideration of the Task Force on AIDS about this legislation.

S-3261-Bassano—Drug Testing Student Athletes. Requires school boards to establish random drug testing programs for student athletes. Testing would be done at school board expense. **Disapproved,** the issue of drug abuse in the school extends beyond the scope of the student athlete. This bill therefore, would send the wrong message and ignore the need to educate and test beyond the athlete population.

S-3320-Ambrosio—Health Care Directives. Establishes procedures for the execution of advance directives for health care. The advance directives involve designation of a health care representative and a statement of personal wishes in the event of loss of decision-making capacity. **Action Deferred,** pending review of the Senate Committee amendments by the Committee on Biomedial Ethics.

S-3327-Codey—Infection Control Education. Requires institutions which educate allied health professionals to incorporate infection prevention and control as part of their program. **No Action.**

S-3346-Codey—Laboratory Director's Licensing. Adds "diagnostic laboratory immunology" to the list of specialty licenses. **No Action.**

S-3389-Paterniti—Health Needs Study (same as **A-2987**). Requires the commissioner of health to conduct a study of the health needs of low income persons over the age of 60. **Disapproved,** this study is unnecessary; there is a wealth of information on this topic available through federal and academic sources.

S-3429-Ewing—Commissioner of Health (same as **A-4142**). Deletes the requirement of a medical license to be commissioner of health. **Conditional Approval,** pending amendment of the bill to create a position of physician general and also to include an MSNJ representative on the Health Care Administration Board.

S-3433-D'Amico—Medical Waste. Increases the categories of regulated medical waste to include—wastes from surgery or autopsy that were in contact with infectious agents, including soiled dressings, sponges, drapes, lavage tubes, drainage sets, underpads, and surgical gloves; laboratory wastes from medical, pathological, pharmaceutical, or other research, commercial, or industrial laboratories that were in contact with infectious agents, including slides and cover slips, disposable gloves, laboratory coats, and aprons; dialysis wastes that were in contact with the blood of patients undergoing hemodialysis, including contaminated disposable equipment and supplies such as tubing, filters, disposable sheets, towels, gloves, aprons, and laboratory coats; discarded medical equipment and parts that were in contact with infectious agents; biological waste and discarded materials contaminated with blood, excretion, exudates, or secretion from human beings or animals who are isolated to protect others from communicable diseases. **Disapproved, w/ Active Opposition if the bill moves,** until the current law is effectively implemented.

S-3463-Contillo—HIV Testing for Certain Defendants. Mandates HIV testing when any criminal commits an offense that results in a victim or third party exchanging body fluids or a needle stick if there is probable cause to believe the defendant is an IV drug user. **Action Deferred,** pending further information from the Task Force on AIDS with the following recommendation that the bill be amended to read "that any person who is charged with a criminal offense that results in the victim or a third party exchanging body fluids should be tested for HIV positivity."

S-3479-Zimmer—Hospital Uncompensated Care Charges. Requires hospitals to itemize uncompensated care costs on patient bills. **No Action.**

S-3546-Feldman—Sexually Abused Children. Requires the commissioner of human services to establish two regional treatment centers for sexually abused children. The regional centers would be networked into community-based model programs and a research institute at one of the schools of higher education. **No Action.**

S-3565-Ewing—HIV Testing of Newborns. Requires that all newborns be tested for HIV sensitivity. **Action Deferred,** pending further information from the Task Force on AIDS with the following recommendations: 1. Consider HIV testing of mother. 2. Consider the possibility of HIV testing of all prenatal patients. 3. Consider false negative and false positive readings and what should be done in these instances.

A-955-Kern—Artificial Insemination. Statutorily regulates artificial insemination, requires certain forms of consent, data gathering, and recordkeeping. **No Action,** the Council directed that correspondence be addressed to the sponsor of the bill recommending that it be written in conformance with the American Fertility Society Guidelines.

A-1456-Kline—Organ Transplants. Prohibits organ transplants unless the tissues are HIV negative. **Approved.**

A-2938-Ogden—Communicable Disease. Requires health care facilities to notify first aid, ambulance, or rescue squads that the patient they are transporting has a communicable disease when that fact is known to the facility. **Approved.**

A-2987-Lobiondo—Health Needs Study (same as **S-3389**). Requires the commissioner of health to conduct a study of the health needs of low-income persons over the age of 60. **Disapproved,** this study is unnecessary; there is a wealth of information on this topic available through federal and academic sources.

A-3804-Littell—Ambulance, Fire, Rescue Squads. Prohibits the formation of local, regional, or statewide EMS coordinating areas. **Approved.**

A-4224-Girgenti—Anabolic Steroids. Makes it a crime to dispense steroids without a prescription to minors; requires the commissioner of health to conduct studies to determine whether anabolic steroids should become scheduled drugs. **Conditional Approval,** pending deletion of the words

ARE YOU MOVING?

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"to minors," making it a crime to dispense steroids without a prescription. Also, pending notification that anabolic steriods will not be added to the controlled schedule II listing.

A-4226-Bush—Fetal Alcohol Syndrome (FAS) (same as **S-3149**). Requires retail establishments (alcohol) to post warnings about alcohol consumption during pregnancy. **Approved.**

A-4255-Palaia—Tanning Salons (same as **S-1554**). Requires the Department of Health to establish safety standards for tanning facilities that shall be enforced through the local board of health. **Approved.**

A-4284-Impreveduto—Chiropractic Board. Creates a separate Board of Chiropractic Examiners and transfers all current rules to the new board. **No Action.**

A-4299-Kline—HIV Testing Newborns. Requires that all newborns be tested for HIV sensitivity under Department of Health guidelines. **Action Deferred,** pending further information from the Task Force on AIDS with the following recommendations: 1. Consider HIV testing of mother; 2. consider the possibility of HIV testing of all prenatal patients; 3. consider false negative and false positive readings and what should be done in these instances.

A-4321-Cooper—HIB. Requires the Department of Health to distribute information to physicians on HIB vaccine. **No Action.**

A-4382-Karcher—Video Terminals in Workplace. An employer shall make available to an operator an annual eye and vision examination that conforms to the recommended components of an eye and vision examination established by the American Optometric Association, with consideration given to the specific requirements of visual correction that may be needed by an operator. **No Action.**

A-4453-Smith—HIV Positive Psychiatric Patients. Provides that patients who are in state psychiatric facilities and are HIV positive are to be isolated in accordance with policies approved by the commissioner of human services and the commissioner of health. **Action Deferred,** pending further information from the Task Force on AIDS, the Council on Mental Health, and the New Jersey Psychiatric Association.

A-4536-Randall—Health Care Directives. Establishes procedures for the execution of advanced directives for health care. The advance directives involve designation of a health care representative and a statement of personal wishes in the event of loss of decision-making capacity. **Action Deferred,** pending further information from the Committee on Biomedical Ethics.

A-4560-Franks—Motor Vehicle Drivers—Drug Testing. Requires the Division of Motor Vehicles to establish a three-year random sample drug testing program for applicants for a driver's license. **Disapproved,** the cost of this legislation would make implementation of the bill very difficult.

A-4576-McEnroe—Graduate Medical Education. Adds the dean of the School of Graduate Medical Education at Seton Hall to the Advisory Council on Graduate Medical Education. **No Action.**

A-4577-Villapiano—Emergency Medical Transportation Services. Requires the Department of Health to notify county health departments of all persons residing in the county that are HIV positive. The county health department is to pass the list on to each EMS transport provider. A similar notice by hospitals is to be given to EMS transport when an HIV positive patient is leaving that hospital by EMS transport. **Disapproved,** unenforceable, unworkable legislation.

A-4683-Zecker—HMO—Medicare. Requires HMOs that offer services to Medicare recipients to provide supplemental coverage in accordance with the Federal Catastrophic Coverage Act. **No Action.**

A-4684-Zecker—Medicare—Medical, Hospital, and Service Corporation. Same as **A-4683;** applies to Blue Cross and Blue Shield. **No Action.**

A-4685-Zecker—Medicare—Health Insurers. Same as **A-4683** applies to health insurers. **No Action.**
☐ June O'Hare

PLACEMENT FILE

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physicians. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY

Hak Joo Cha, MD, 22 Hamilton Ct., Lawrenceville, NJ 08648. Catholic Medical College 1972. Board eligible. Solo, partnership, group, fee-for-service. Available.

CARDIOLOGY

Fredric Gerewitz, MD, 125 Montgomery Ave., Bala Cynwyd, PA 19004. SUNY-Downstate 1984. Board eligible. Group or partnership. Available July 1990.

Matilda M. Taddeo, MD, 2269 Ellis Ave., Bronx, NY 10462. West Indies 1983. Board eligible. Group, partnership. Available.

GASTROENTEROLOGY

Eric Avezzano, MD, 2510 B.S. Walter Reed Dr., Arlington, VA 22206. SUNY-Stony Brook 1985. Board eligible; board certified (IM). Group, partnership, solo. Available July 1990.

David L. Fishkin, MD, 1000J Scaife Hall, University of Pittsburgh, Pittsburgh, PA 15261. SUNY-Downstate 1985. Board eligible. Board certified (IM). Group, partnership, solo. Available July 1990.

INTERNAL MEDICINE

Albert S. Ford, MD, 943 Norway Ave., Huntington, WV 25703. Meharry Medical College 1982. Board eligible. Solo; practice purchase. Available June 1990.

Himanshu Shah, MD, 71 Louis St., New Brunswick, NJ 08901. UMDNJ 1988. Part-time position. Available.

NUCLEAR MEDICINE

Robert W. Cifers, MD, 26 Somers Ave., Seaville, NJ 08230. Ohio State 1983. Board eligible. Available.

OTOLARYNGOLOGY

Samuel H. Selesnick, MD, 450 East 63rd St., #8F, New York, NY 10021. NYU 1985. Board eligible. Available July 1990.

PATHOLOGY

Ruth Kreitzer-Richards, MD, 5470 Mosholu Ave., Riverdale, NY 10471. Guadalajara 1983. Board certified. Available July 1990.

CONTINUING EDUCATION

ANESTHESIOLOGY

March

24- **Annual Postgraduate**
25 **Anesthesia Seminar**
All day—The Hyatt, Cherry Hill
(New Jersey State Society of Anesthesiologists)

CARDIOLOGY

February

21 **Anti-Arrhythmic Therapy**
10:30-11:30 P.M.—St. Mary's Hospital, Passaic
(AMNJ)

March

14 **Advanced Cardiac Life Support**
21 All day—Freehold Area Hospital, Freehold
(Freehold Area Hospital)

DERMATOLOGY

February

21 **Robert Wood Johnson Medical School Dermatological Conferences**
6-9 P.M.—Rutgers Community Health Plan, US #1, New Brunswick
(UMDNJ)

March

21 **Robert Wood Johnson Medical School Dermatological Conferences**
6-9 P.M.—Rutgers Community Health Plan, US #1, New Brunswick
(UMDNJ)

INFECTIOUS DISEASE

February

6 **Counseling and Testing for HIV Infection**
12 Noon-1 P.M.—The Hospital Center at Orange, Orange
(AMNJ and NJDOH)

12 **Counseling and Testing for HIV Infection**
12 Noon-1 P.M.—East Orange General Hospital, East Orange
(AMNJ and NJDOH)

28 **Counseling and Testing for HIV Infection**
11:30 A.M.-12:30 P.M.—Hamilton Hospital, Hamilton
(AMNJ and NJDOH)

28 **Clinical Management of HIV Infection**
1:30-2:30 P.M.—Trenton Psychiatric Hospital, Trenton
(AMNJ and NJDOH)

MEDICINE

February

1 **Adrenal Disease**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

2 **Update on Antibiotic Therapy**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

2 **Continuing Medical Education**
9 **Program**
16 12 Noon-1 P.M.—United Hospitals
23 Medical Center, Newark
(United Hospitals Medical Center)

7 **Winter Dinner Meeting**
6:30 P.M.—The Hilton at Short Hills, Short Hills
(New Jersey Gastroenterological Society)

7 **Medical Lecture Series**
14 10:30-11:30 A.M.—Christ
21 Hospital, Jersey City
28 *(Christ Hospital)*

7 **Internal Medicine**
14 **Review Course**
21 4-7 P.M.—University Hospital,
28 New Brunswick
(AMNJ and UMDNJ)

7 **Urinary Incontinence of the Elderly**
2-3 P.M.—John E. Runnells Hospital of Union County, Berkeley Heights
(AMNJ)

8 **Update on Geriatric Medicine**
22 4:30-6:30 P.M.—Cooper Hospital, Camden
(Cooper Hospital/UMDNJ)

9 **How Healthcare Professionals Can Protect Themselves from Frivolous Lawsuits**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

12 **Fluid and Electrolyte Imbalance**
7-8 P.M.—Wallkill Valley General Hospital, Sussex
(AMNJ)

14 **Dialogues in Critical Medical Decisions**
7:30-9 P.M.—Englewood Hospital, Englewood
(Englewood Hospital)

15 **Continuing Medical Education**
12 Noon—Somerset Medical Center, Somerville
(Somerset Medical Center)

16 **Role of NSAIDs in the Geriatric Population**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

17 **Morbidity and Mortality**
24 **Conference**
8:30-10 A.M.—New Jersey Medical School, Newark
(UMDNJ)

16 **Current Clinical Concepts in Rheumatology/Immunology: Acute Phase Reactants**
12:15-1:15 P.M.—Kennedy Memorial Hospital, Stratford
(UMDNJ/Kennedy Memorial Hospital)

21 **Dually Diagnosed**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

22 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center)

23 **Diabetic Nephropathy**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(AMNJ)

March

1 **Colitis**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

HU

Hahnemann University

Department of Medicine

WEDNESDAYS GRAND ROUNDS
8:30 A.M.-9:30 A.M.
January-May 1990

JANUARY 1990

January 3, 1990
PROGRESSIVE MULTIFOCAL LEUKOENCEPHALOPATHY
Elliott L. Mancall, M.D.
Professor and Chairman
Department of Neurology
Hahnemann University

January 10, 1990
SODIUM SENSITIVITY & RESISTANCE OF BLOOD PRESSURE
Myron H. Weinberger, M.D.
Professor of Medicine
Director, Hypertension Research Center
Indiana University School of Medicine
Indianapolis, IN

January 17, 1990
RHEUMATOLOGY & IMMUNOLOGY: NEWER ADVANCES
Raphael J. DeHoratius, M.D.
Professor of Medicine
Director, Division of Clinical Immunology and Rheumatology
Hahnemann University

January 24, 1990
SKIN CANCER (Non-melanoma)
Gary R. Kantor, M.D.
Associate Professor of Medicine and Dermatology
Department of Medicine
Hahnemann University

January 31, 1990
SPACE MEDICINE: CARDIOVASCULAR, BONE, FLUID SHIFTS AFFECTS OF SPACE
G. John DiGregorio, M.D., Ph.D.
Professor of Pharmacology and Medicine
Director, Division of Toxicology
Consultant to N.A.S.A.
Hahnemann University

FEBRUARY 1990

February 7, 1990
SOMATOSTATIN, CARCINOID SYNDROME
John Oates, M.D.
Professor & Chairman
Department of Medicine
Vanderbilt University
Nashville, TN

February 14, 1990
LYME DISEASE
Steven Billstein, M.D., MPH
Associate Professor of Medicine
Columbia Presbyterian Medical Center
New York, NY

February 21, 1990
NEOPLASTIC DISEASE ADVANCES IN THERAPY
Isadore Brodsky, M.D.
Professor and Chairman
Department of Neoplastic Diseases
Director, Institute of Cancer & Blood Diseases
Hahnemann University

February 28, 1990
CLINICAL PATHOLOGIC CONFERENCE
Chief Residents:
Michael DeAngelis, M.D.
Ana Nunez, M.D.
Ralph McKibben, M.D.
Matthew Sandler, M.D.

MARCH 1990

March 7, 1990
IMMUNE INTERVENTION IN TYPE I DIABETES MELLITUS
Jay S. Skyler, M.D.
Professor of Medicine
Director, Diabetes Mellitus
University of Miami
Miami, FL

March 14, 1990
COPD: PATHOGENESIS AND TREATMENT ADVANCES
Mark J. Utell, M.D.
Professor of Medicine and Toxicology
University of Rochester
Rochester, NY

March 21, 1990
CLINICAL PHARMACOLOGY
Vincent J. Zarro, M.D., Ph.D.
Associate Professor of Pharmacology & Medicine
Director, Division of Clinical Pharmacology
Hahnemann University

March 28, 1990
DERMATOLOGIC TREATMENT WITH RETINOIDS AND CYCLOSPORINE
Richard L. Spielvogel, M.D.
Professor of Medicine and Dermatology
Director, Division of Dermatology
Hahnemann University

WEDNESDAYS
MEDICAL SEMINAR SERIES
8:30 A.M.-3:00 P.M.

JANUARY 10, 1990

Hypertension: Sodium, Catechols, CNS Geriatrics

Hahnemann University Faculty
Allan B. Schwartz, M.D.
Charles Swartz, M.D.

Guest Faculty
Myron Weinberger, M.D.
University of Indiana School of Medicine
Carl Engelman, M.D.
University of Pennsylvania School of Medicine

MARCH 7, 1990

Diabetes Mellitus: Immune Mechanisms & Insulin Therapy Innovations

Hahnemann University Faculty
Jeffrey L. Miller, M.D.
Leslie I. Rose, M.D.

Guest Faculty
Jay S. Skylar, M.D.
University of Miami
Robert Tannenberg, M.D.
Georgetown University

MARCH 28, 1990

Dermatology: Treatment with Retinoids and Cyclosporine

Hahnemann University Faculty
Richard L. Spielvogel, M.D.
Eric C. Vonderheid, M.D.
Gary R. Kantor, M.D.

Guest Faculty
Cynthia Guzzo, M.D.
University of Pennsylvania
Henry H. Roenigk, M.D.
Northwestern University

Presented by:
William S. Frankl, M.D.
Professor of Medicine and Chairman
Department of Medicine
Allan B. Schwartz, M.D.
Professor of Medicine and
Director, Continuing Medical Education
Department of Medicine

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For further information: (215) 448-8263

2 **Continuing Medical**
9 **Education Program**
16 12 Noon-1 P.M.—South Jersey
23 Hospital System, Bridgeton
30 *(South Jersey Hospital System)*

7 **Internal Medicine**
14 **Review Course**
21 4-7 P.M.—University Hospital,
28 New Brunswick
(AMNJ and UMDNJ)

7 **Diabetes-Related Kidney Disease**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ and NJDOH)

7 **Prevention of Lower Extremity Amputations**
11:30 A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ)

7 **Medical Lecture Series**
14 10:30-11:30 A.M.—Christ
21 Hospital, Jersey City
28 *(Christ Hospital)*

8- **Annual Meeting and Scientific**
11 **Assembly, New Jersey Academy of Family Physicians**
Caesar's Palace, Atlantic City
(NJ Academy of Family Physicians)

8 **Update on Geriatric Medicine**
22 4:30-6:30 P.M.—Cooper Hospital, Camden
(Cooper Hospital/UMDNJ)

9 **Alcoholism**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

9 **Functional Assessment of the Elderly**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ)

9 **Rheumatology Case Presentation Conference**
12:15-1:15 P.M.—Kennedy Memorial Hospital, Stratford
(UMDNJ/Kennedy Memorial Hospital)

12 **Thyroid Disease**
1-2 P.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ)

13 **Renal Biopsy Conference**
12:30-2 P.M.—Barnert Memorial Hospital Center, Paterson
(Barnert Memorial Hospital Center)

14 **Dialogues in Critical Medical Decisions**
7:30-9 P.M.—Englewood Hospital, Englewood
(Englewood Hospital)

14 **Diabetes-Related Kidney Disease**
11:30-A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ and NJDOH)

14 **Chronic EBV Virus**
10:30-11:30 A.M.—University Hospital, New Brunswick
(AMNJ)

15 **Diabetes-Related Kidney Disease**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ and NJDOH)

15 **Aspiration Syndrome in the Mentally Retarded**
1:30-2:30 P.M.—Vineland Developmental Center, Vineland
(AMNJ)

15 **Continuing Medical Education Series**
12 Noon—Somerset Medical Center, Somerville
(Somerset Medical Center)

16 **Management of Abdominal Emergencies**
1-2 P.M.—Woodbridge Developmental Center, Woodbridge
(AMNJ)

17- **Annual Meeting, American**
18 **College of Emergency Physicians**
All day—Trump Plaza Hotel & Casino, Atlantic City
(American College of Emergency Physicians)

17 **Morbidity and Mortality**
24 **Conference**
8:30-10 A.M.—New Jersey Medical School, Newark
(UMDNJ)

20 **Renal Adaptation to Ventilatory Response to Metabolic Acid-Base Disorders**
6:30-9:30 A.M.—Overlook Hospital, Overlook
(AMNJ)

21 **Retinopathy**
11:30 A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ)

22 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center)

30 **Clinicopathologic Case Presentation**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

OBSTETRICS AND GYNECOLOGY

February

14 **Prematurity, Postmaturity, and Dysmaturity**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

14 **Diabetes in Pregnancy**
12 Noon-1 P.M.—St. James Hospital, Newark
(AMNJ)

March

9- **Annual Semmelweiss-Waters**
11 **Ob/Gyn Conference**
8 A.M.-5 P.M.—Bally's Grand Hotel, Atlantic City
(AMNJ)

ONCOLOGY

February

9 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley Hospital Center, Sussex
(Wallkill Valley Hospital Center)

14 **Tumor Board Conference**
12 Noon-1 P.M.—Memorial Hospital of Salem County, Salem
(Memorial Hospital of Salem County)

22 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(Newcomb Medical Center)

March

9 **Tumor Board Meeting**

224th ANNUAL MEETING
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Atlantic City

Claridge Casino Hotel
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LOCATIONS—DATES

Houston, TX	Feb. 24-25
Atlantic City, NJ	Mar. 24-25
San Juan, PR*	May 5-6
Seattle, WA*	June 2-3
Denver, CO	July 7-8

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11 A.M.-12 Noon—Wallkill Valley
Hospital Center, Sussex
(Wallkill Valley Hospital Center)

14 **Tumor Board Conference**
11 A.M.-12 Noon—Memorial
Hospital of Salem County, Salem
(Memorial Hospital of Salem County)

22 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb
Medical Center, Vineland
(Newcomb Medical Center)

28 **Dinner Meeting**
6:30-9:30 P.M.—The Hyatt,
New Brunswick
(Radiation Oncology Section-AMNJ)

PEDIATRICS

February

1 **Pediatric Grand Rounds**
8 8:30-9:30 A.M.—Robert Wood
15 Johnson Medical School, MEB,
22 102, New Brunswick
(UMDNJ)

22 **Update in Aspects of Pediatrics**
Marriott Hotel, Saddle Brook
(Northern NJ Pediatric Society)

27 **Update in Ribavirin Therapy**
12 Noon-1 P.M.—Newark Beth
Israel Medical Center, Newark
(Newark Beth Israel Medical Center)

March

1 **Pediatric Grand Rounds**
8 8:30-9:30 A.M.—Robert Wood
15 Johnson Medical School, MEB,
22 102, New Brunswick
29 *(UMDNJ)*

22 **Update in Aspects of Pediatrics**
Marriott Hotel, Saddle Brook
(Northern NJ Pediatric Society)

PSYCHIATRY

February

1 **Case Seminars To Improve**
15 **Psychotherapeutic Technique**
8-10 P.M.—2 West Northfield
Road, Livingston
(Advanced Psychiatric Study Group)

6 **Anxiety Disorders**
10-11 A.M.—Green Brook
Regional Center, Green Brook
(AMNJ)

7 **Medical Aspects of Behavior Management**
10-11 A.M.—Johnstone Training
and Research Center, Bordentown
(AMNJ)

March

1 **Case Seminars To Improve**
15 **Psychotherapeutic Technique**
8-10 P.M.—2 West Northfield
Road, Livingston
(Advanced Psychiatric Study Group)

16 **Teenage Suicide**
12 Noon-1 P.M.—South Jersey
Hospital System, Bridgeton
(South Jersey Hospital System)

PULMONOLOGY

March

2 **18th Annual Joint Conference New Jersey Thoracic Society/ New Jersey Chapter of the American College of Chest Physicians**
Hyatt Regency, New Brunswick
(New Jersey Thoracic Society)

RADIOLOGY

February

7 **Ultrasound**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(St. Mary's Hospital)

15 **1989 Scientific Meeting**
7:30-9:30 P.M.—Saint Barnabas
Medical Center, Livingston
(Radiological Society of New Jersey-Diagnostic Section, AMNJ)

22 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas
Medical Center, Livingston
(Saint Barnabas Medical Center)

March

15 **1989 Scientific Meeting**
7:30-9:30 P.M.—Saint Barnabas
Medical Center, Livingston
(Radiological Society of New Jersey-Diagnostic Section, AMNJ)

22 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas
Medical Center, Livingston
(Saint Barnabas Medical Center)

31 **Seeing the Unseen: Noninvasive Vascular Imaging in the 90s**
8 A.M.-4 P.M.—The Ramada
Renaissance, East Brunswick
(AMNJ)

SURGERY AND ITS SPECIALTIES

February

4 **Surgical Treatment of Cardiothoracic Disease**
10-11:30 A.M.—New Jersey
Medical School, MSB, 506B,
Newark
(UMDNJ)

6 **Weekly Vascular Case**
13 **Conference**
20 7:30-8:30 A.M.—Robert Wood
27 Johnson Medical School, MEB,
108B, New Brunswick
(UMDNJ)

17 **Morbidity and Mortality**
24 **Conference**
8:30-10 A.M.—New Jersey
Medical School, MSB, 506B,
Newark
(UMDNJ)

27 **Englewood Surgical Society Lecture Series**
8-10 P.M.—Englewood Club
(Englewood Surgical Society)

28 **Journal Club, Section of Cardiothoracic Surgery**
6:30-9:30 P.M.—2 Mountain
Ridge Drive, Livingston
(UMDNJ)

March

4 **Surgical Treatment of Cardiothoracic Disease**
10-11:30 A.M.—New Jersey
Medical School, MSB, 506B,
Newark
(UMDNJ)

6 **Weekly Vascular Case**
13 **Conference**
20 7:30-8:30 A.M.—Robert Wood
27 Johnson Medical School, MEB,
108B, New Brunswick
(UMDNJ)

17 **Morbidity and Mortality**
24 **Conference**
8:30-10 A.M.—New Jersey
Medical School, MSB, 506B,
Newark
(UMDNJ)

27 **Englewood Surgical Society Lecture Series**
8-10 P.M.—The Englewood Club,
Englewood
(Englewood Surgical Society)

28 **Journal Club, Section of Cardiothoracic Surgery**
6:30-9:30 P.M.—2 Mountain
Ridge Drive, Livingston
(UMDNJ)

UROLOGY

February

2 **Urology Grand Rounds**
9 New Jersey Medical School,
16 MSB, C600, Newark
23 *(UMDNJ)*

March

2 **Urology Grand Rounds**
9 New Jersey Medical School,
16 MSB, C600, Newark
23 *(UMDNJ)*
30

21 **Urinary Tract Infection**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

IN MEMORIAM

Arthur F. Ackerman. A retired member of our Union County component, Arthur Fowler Ackerman, MD, died on August 20, 1989. Born in 1903 in Passaic, Dr. Ackerman earned his medical degree at Columbia University College of Physicians and Surgeons, New York, in 1927; he was awarded his New Jersey license in 1930. A pediatrician, Dr. Ackerman was affiliated with Overlook Hospital, Summit, and Babies Hospital, New York. Dr. Ackerman was a member of the American Academy of Pediatrics and of the American Medical Association, and was a diplomate of the American Board of Pediatrics.

Frank R. Begen. Past-president Frank Robert Begen, MD, died on October 15, 1989, at the age of 63. Dr. Begen served as president of the Medical Society of New Jersey in 1977 and was an active fellow of the Society. Born in 1926 in Jersey City, Dr. Begen was a graduate of Princeton University. He was awarded a medical degree from New York Medical College in 1949. Dr. Begen served his internship at Holy Name Hospital, Teaneck, and his residency at St. Claire's Hospital, New York City. A Bergen County urologist, Dr. Begen was affiliated with Holy Name Hospital, Bergen Pines Hospital, Paramus, and Riverside General Hospital, Secaucus. A member of the American Medical Association, of our Bergen County component, and of the Academy of Medicine of New Jersey, Dr. Begen served on the Cresskill board of education and was an Air Force physician.

Selig L. Brauer. Retired Jersey City gynecologist Selig Leo Brauer, MD, died on August 11, 1989. A 1905 Jersey City native, Dr. Brauer kept a Jersey City private practice for many years, retiring in 1985. Dr. Brauer was graduated from the University of Maryland Medical School in 1929, and received his New Jersey license the following year. He was assistant attending at Christ Hospital and Greenville Hospital, both in Jersey City. A member of our Hudson County component and of the AMA, Dr. Brauer received the Medical Society of New Jersey's Golden Merit Award in 1979 for 50 years of medical practice. During World War II, Dr. Brauer was a major in the United States Army.

Richard S. Colfax. At the age of 67, Richard Schoonmaker Colfax, MD, died on October 11, 1989. Born in Paterson in 1921, Dr. Colfax earned his medical degree at New York Medical College in 1947; he received his New Jersey license in 1948. A resident and physician in Pompton Lakes since 1949, Dr. Colfax was affiliated with Paterson General Hospital. In addition, Dr. Colfax was the sports team physician for Pompton Lakes High School. He was a member of our Passaic County component and of the American Medical Association. Dr. Colfax served in the Army Medical Corps attaining the rank of lieutenant.

Mortimer I. Cowen. Retired general practitioner, Mortimer I. Cowen, MD, died on July 25, 1989. Born in 1911 in Plainfield, Dr. Cowen earned his medical degree from the University of Zurich, Switzerland, in 1936. After completing his internship at several New York City hospitals, Dr. Cowen entered the Civilian Conservation Corps program in 1940, where he remained for one year, serving as medical officer in Virginia. He was a first lieutenant in the Medical Corps Reserve for the United States Army from 1941 until the end of World War II, attaining the rank of lieutenant colonel. He was awarded his New Jersey license in 1946 and established his general practice in Iselin. During his career, he was affiliated with Perth Amboy General Hospital and J.F.K. Medical Center, Edison. Dr. Cowen was an emeritus member of the Middlesex County Medical Society and a member of the American Medical Association and of the Academy of Medicine of New Jersey. In 1986, Dr. Cowen received the Medical Society of New Jersey's Golden Merit Award for 50 years of service to the profession. Dr. Cowen retired from active practice in 1983.

Joseph W. Fleisher. At the untimely age of 59, Joseph W. Fleisher, MD, died on October 13, 1989. Born in Philadelphia, Dr. Fleisher earned his medical degree at Temple University Medical School, Philadelphia, in 1955. He served an internship at Albert Einstein Medical Center, Philadelphia, and a residency in obstetrics-gynecology at the same institution. Dr. Fleisher received his New Jersey license in 1961 and soon after became a member of our Hudson County component. For 28 years, Dr. Fleisher was an obstetrician-gynecologist in Bayonne and served as chief of obstetrics-gynecology at Bayonne Hospital. A diplomate of the American Board of Obstetrics and Gynecology and a fellow of the American College of Obstetrics and Gynecology and of the American College of Surgery, Dr. Fleisher served as president of his county medical society.

Henry C. Irving. A family physician in Jersey City for 50 years before retirement, Henry Clay Irving, MD, died on September 23, 1989, at the age of 77. A lifelong resident of Jersey City, Dr. Irving received his medical degree from Howard University College of Medicine, Washington, DC, in 1937, and then was awarded his New Jersey license. Affiliated with two Jersey City hospitals, Jersey City Medical Center and Greenville Hospital, Dr. Irving was a fellow of the American Academy of Family Practice, and was a member of our Hudson County component and of the AMA. He received the Golden Merit Award in 1987 from the Medical Society of New Jersey. During World War II, Dr. Irving served in the United States Army medical corps as a captain.

Edward W. Jewell, III. A member of our Bergen County component, Edward William Jewell, III, MD, died on October 18, 1989, at the age of 64. A dermatologist, Dr. Jewell was a past medical staff president of Bergen Pines County Hospital, Paramus, and also was affiliated with The Valley Hospital, Ridgewood, and Chilton Memorial Hospital, Pompton Plains. Born in 1924 in Iowa, Dr. Jewell received his medical degree from St. Louis University School of Medicine, Iowa, in 1952, and was awarded his New Jersey license in 1956. Dr. Jewell was a diplomate of the American Board of Dermatology and a member of the American Medical Association. He was a Navy veteran of World War II.

Herbert Johnson. Obstetrician/gynecologist Herbert Johnson, MD, a member of our Camden County component, died on August 21, 1989, at the age of 80. Born in 1908, Dr. Johnson received his medical degree at the University of Pennsylvania Medical School in 1936. He completed his internship and residency at Cooper Hospital, and was awarded his New Jersey license in 1939. He founded one of the first group medical practices in southern New Jersey, and served as chief of obstetrics at Cooper Hospital from 1960 until his retirement in 1972. In addition, Dr. Johnson was an adjunct professor at Thomas Jefferson University Hospital and at the University of Pennsylvania. After his retirement, he served as the medical director of the Family Planning Clinic of Gloucester County. A member of the American Medical Association, Dr. Johnson was a fellow of the American College of Surgeons, and a diplomate of the American Board of Obstetrics and Gynecology. During World War II, he served in the South Pacific for the United States Navy as a lieutenant commander.

Thomas D. Monte. Following 40 years of ophthalmology practice and several years of retirement, Thomas D. Monte of Montclair died on September 23, 1989, at the age of 77. A Brooklyn, New York, native, Dr. Monte was awarded his medical degree from Long Island College of Medicine (now the Medical College, State University of New York) in 1936, and his New Jersey license in 1939. Dr. Monte served on the staff of St. Vincent's Hospital, Montclair, where he was chief of ophthalmology and staff president, and The Mountainside Hospital, Glen Ridge. A diplomate in ophthalmology and a fellow of the American Board of Ophthalmology, Dr. Monte was a member of the Pan-American Society of Ophthalmology, of our Essex County component, and of the AMA. He received the Golden Merit Award in 1986.

B. Ralph Wayman. A member of our Mercer County component, Bernard Ralph Wayman, MD, died on October 17, 1989. Born in 1932 in Trenton, Dr. Wayman was awarded his medical degree from Jefferson Medical College, Pennsylvania, in 1963. He served an internship at Helene Fuld Hospital, Trenton, and was awarded his New Jersey license in 1964. Dr. Wayman was the founder and director of Glen Roc Medical Center, West Trenton, and Morrisville Medical Center, Pennsylvania. Dr. Wayman was a member of the American Medical Association and served as president of the Mercer County Medical Society in 1978, and also served his county as treasurer, vice-president, and chairman of various committees, and he served his State Society as a member of many councils. In 1978, Dr. Wayman was honored with MSNJ's Professional Service Award. In addition to his medical responsibilities, Dr. Wayman wrote a column for the *Trentonian* newspaper. From 1975 to 1983, Dr. Wayman served as president of Professional Data Corporation and for the past six years, was president of the Neighborhood Doctor Center Corporation. Dr. Wayman served in the United States Army from 1953 to 1955. Other professional responsibilities included membership in the Speaker's Bureau of the American Medical Association, the National Board of Medical Examiners, the American Geriatric Society, the Royal Society of Health, the American Heart Association, the Malpractice Arbitration Board of New Jersey, the Physician Service Review Organization of Pennsylvania, and the Academy of Medicine of New Jersey. During his career, Dr. Wayman was affiliated with Mercer Medical Center, St. Francis Medical Center, and Helene Fuld Hospital, all in Trenton.

EDITORIAL CRITERIA

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Content. The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports; review articles; clinical notes; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and opinions. Editorials are prepared by the editor and by guest contributors on timely and relevant subjects. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevant to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made to an audience in New Jersey.

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Specifications. Submit two manuscripts that must be typewritten and double-spaced on 8½″ by 11″ paper. Statistical methods should be identified.

Authors are asked to seek clarity, accuracy, and originality; attention to details of grammar, spelling, and typing are important.

The title page should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests and correspondence should be sent.

The author should submit a 30-word abstract.

Illustrations should be professional quality, black-and-white glossy prints. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission must be submitted.

Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

References should not exceed 35 citations except in review articles, and should be cited consecutively by numbers in parentheses at the end of the sentence. The reference list should be typewritten and double-spaced on separate 8½″ by 11″ sheets in numerical order. The style of *NEW JERSEY MEDICINE* for references is that of *Index Medicus:*

1. Goldwyn RM: Subcutaneous mastectomy. *NJ MED* 74:1050-1052, 1977.
2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

Publication Policy. Receipt of each manuscript will be acknowledged; the paper will be referred to the Editorial Board. The final decision is reserved for the editor. No direct contact beween the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. Galley proofs will be submitted to the author for correction.

Reprint Orders. Reprints may be ordered after the author is notified that the article has been selected for a specific issue. A check for the cost of reprints must accompany that order.

Communications. All communications should be sent to the editor, *NEW JERSEY MEDICINE,* MSNJ, 2 Princess Road, Lawrenceville, NJ 08648.

NEWSWATCH

LOWER MEDICAL WASTE FEES

S-3867/A-5080, introduced by Senator Dan Dalton (D-Gloucester) and Assemblyman Bob Shinn (R-Burlington) at the request of MSNJ, passed the Legislature and was signed into law by Governor Kean on January 2, 1990. The following maximum charges now apply:

Under 50 lbs/yr	$100
50-200 lbs/yr	$300
Over 200-300 lbs/yr	$500
Over 300-1,000 lbs/yr	$1000
Over 1,000 lbs/yr	$3500

The State Department of Environmental Protection has to refund the difference between what it collected and what is due under the new rate table. Refunds must be made by July 2, 1990.

MIIENJ DISTRIBUTES DIVIDEND

The Medical Inter-Insurance Exchange of New Jersey (MIIENJ), which had declared an 11 percent dividend due on its 1978 policies, distributed the money in mid-January 1990. The dividend was declared over two years ago but the Department of Insurance refused to authorize release of the money. MIIENJ legal counsel concluded the Department had no legal basis for such a position so the MIIENJ Board of Governors proceeded with the dividend payment.

MSNJ and MIIENJ SUE OVER MALPRACTICE SURCHARGE

The Medical Society of New Jersey (MSNJ) and the Medical Inter-Insurance Exchange of New Jersey (MIIENJ) have begun litigation against the Insurance Department over the proposed malpractice surcharge. The Department wants to impose the surcharge to recoup a $65 million loss caused by its inattention to the mismanagement of the New Jersey Medical Malpractice Reinsurance Association.

On January 19, 1990, Herbert Stern, MSNJ's special counsel, filed a request with the Appellate Division to stay collection efforts until the case is heard on an expedited basis.

Neither the New Jersey Hospital Association nor the Princeton Insurance Company is opposed to the surcharge.

MEDICAL LICENSURE REFORM

S-2936 passed both Houses and was conditionally vetoed by the governor. His conditions were acted upon by the Legislature and the governor signed the bill into law.

(continued)

Significant gains in the law for the physicians are:

1) Confidentiality in disciplinary proceedings except for final adverse action.

2) Treating physicians of those undergoing rehabilitation are exempt from reporting.

3) Physicians may not be sued for money damages for failure to report.

4) Malpractice settlements cannot be introduced into evidence before the State Board of Medical Examiners.

5) A review panel separate from the State Board of Medical Examiners will investigate and review all but emergent disciplinary cases.

6) Malpractice judgments may not form the basis of a licensing action.

7) Separation of functions for deputy attorney generals that advise the panel and the State Board of Medical Examiners.

8) Burden of proof is elevated from the prior standard of "to the satisfaction of the Board" to the legal standard of "simple preponderance."

The governor refused to sign the bill with the standard sought by MSNJ of "clear and convincing." Regardless of that event, the legislation is a major advance in securing due process and fundamental fairness for physicians.

SUPREME COURT TO HEAR PHYSICAL THERAPY SUIT

The Supreme Court has scheduled the suit by MSNJ against the State Board of Physical Therapy for argument in mid-February. MSNJ won a unanimous decision in the Appellate Division that declared void, regulations that would permit therapists to examine and treat patients without physician direction and to modify physician prescriptions.

PRO LITIGATION ACCELERATES

The PRO suit against MSNJ has moved into active discovery. MSNJ has secured 1,500 pages of PRO documents from the federal government and the Court has authorized Society attorneys to begin depositions.

PRO's request for discovery and to take depositions has been denied at this point and the legal counsel to the PRO has withdrawn because of a potential "conflict."

MSNJ NEWSLETTER

MEDICAID CLAIMS PAYMENT BY DIRECT DEPOSIT

A new convenience has been announced by Medicaid, electronic funds transfer, that will become available in about a year. Physicians will have the option of receiving claims payment automatically as a direct deposit to the checking account. If you are interested in direct deposit of your payments, please indicate in writing, to the following address: The State of New Jersey, Department of Human Services, Division of Medical Assistance and Health Services, CN 712, Trenton, NJ 08625, Attention: EFT.

COLLECTION ADVICE FROM I.C. SYSTEM, INC.

Unnecessary delay in going after bad debts can cost creditors more money than ever before. In a recent decision by the U.S. Ninth Circuit Court of Appeals, an Oregon collection agency was found to be in violation of the law by threatening adverse consequences if a debt was not paid within ten days. "No fair," said the court.

Debt collection agencies are required by the Fair Debt Collection Practices Act (FDCPA) to give people 30 days to dispute the validity of any debt. The FDCPA applies to collections from individuals, rather than businesses.

While not every debtor will become immediately aware of this new opportunity to delay payments, it is one more reason for creditors to move quickly when using a collection agency to assist them in recovering difficult accounts.

MEDICARE ATTESTATION

When signing the Medicare attestation form, please note that you are stating that to your knowledge, the diagnoses and procedures shown in the chart are accurate.

PROFESSIONAL RESPONSIBILITY

Question: If a medical group, center, or hospital suspects an employed physician of having an alcohol problem or has discovered that the physician employee has had an arrest due to such a problem, are the employers in any way liable for not addressing the issue with the employee if a suit should ever be filed against that employee? **Answer:** The courts hold hospitals and physician-employers responsible for ascertaining the fitness of physicians in their employ to render appropriate care to the patients entrusted to their care. If there is valid evidence to indicate the presence of an alcohol problem, the employer does indeed have a responsibility to take appropriate action to identify and correct that problem. If the physician presents a risk to patients, the physician should be removed from patient contact until the illness is under documented, effective control. In some instances, especially if formal hospital staff action is taken, there may be a requirement to notify the State Board of Medical Examiners. In all such cases, the Medical Society of New Jersey's Physicians' Health Program is available to provide advice and assistance.

CHILDREN'S TRUST FUND

Have you ever questioned the value we place on children in our society? Almost every walk of life requires training, be it computers or carpentry.

Yet you can go all the way through high school and college and never receive a single hour of instruction in how to be a parent. It seems we expect people to be able to raise children on instinct. Parenting is stressful. Sometimes that stress results in children hurt and lives shattered. In the past few years, we have been made uncomfortably aware of the problem and prevalence of child abuse and neglect and its devastating effect on our society. Last year nearly 57,000 reports of child abuse and neglect were recorded in New Jersey. Many of these children grow up to be abusive parents.

The time to stop child abuse is before it starts, and you can help. You can donate to the Children's Trust Fund. The Fund was created by law in 1985 to encourage and finance community-based child abuse prevention programs throughout the state. In 1989, the Fund awarded $530,071 to 28 community organizations which offer a variety of services to children and parents including parenting education classes, self-help groups, respite care, behavior management, counseling, therapy, and community education efforts. Public donations and the federal challenge grant are the primary source of money for the Fund. A check-off system on state income tax returns is an easy way to designate a portion of your refund directly to the Fund. In addition to the check-off, you can send a donation at any time to the Children's Trust Fund To Prevent Child Abuse, CN 711, Trenton, NJ 08625.

HALFWAY HOUSE PROGRAM

In an effort to break the addictive patterns of mentally ill chemical abusers (MICAs), Greystone Park State Psychiatric Hospital has opened 20 cottages as halfway houses for recovering patients. A spokesperson for Greystone stated that the cottage program will resemble traditional 28-day alcohol inpatient rehabilitation treatment programs, but the average stay will be between 60 to 90 days. The program will involve emphasis on one-on-one counseling and group therapy, and will focus on intervening in addictive thought patterns and in raising patients' self-esteem. Patients will be admitted to the cottage program after they have completed detoxification, and will be closely monitored.

PUBLIC ADVOCATE CHALLENGES RATE INCREASES

Public Advocate Alfred Slocum plans to file actuarial information with the State Insurance Department that will challenge rate increases being sought by Blue Cross and Blue Shield of New Jersey. The rate hikes would increase rates paid by 350,000 individual policyholders by 33.7 percent, and increase the rates paid by 255,000 senior citizens for Medigap coverage by 28.9 percent a year. The rate increases being sought would increase Medigap premiums by $124, family coverage by $2,400 a year, and single coverage by about $440 per year. If the insurance commissioner does not act, the rate increases will go into effect automatically on February 1, 1990. Slocum has not stated what he feels the rate increases should be, but has said that it should not be what the Blue's are seeking. Blue Cross and Blue Shield are seeking the increases to trim the corporation's $230 million deficit.

SEVERITY OF ILLNESS DATA

Severity of Illness (SOI) data will not be incorporated into the 1990 rates. However, a new project will study two different SOI systems during 1990. All Chapter 83 hospitals will be involved in the study and have their costs of participating in the study reimbursed through their markup factors. The data to be collected will be based on 1988 discharges instead of current year discharges.

UNCOMPENSATED CARE

The Health Care Administration Board approved the revised regulations related to complying with the uncompensated care legislation. These regulations are scheduled to be published in the December 18, 1989, *New Jersey Register*. The Department indicated that the costs of complying with the regulations could be appealed as a legal change. In an effort to avoid processing individual hospital appeals, the Department anticipates creating a generic appeal methodology. The Department has not finalized the audit procedures related to uncompensated care but is in the process of developing the guidelines.

HOSPITAL RATE PACKAGES

The Department indicated that the 1990 rate packages were being mailed to hospitals and that current simulations do not imply the need for protective corridors to soften the impact of rebasing in 1990.

HOSPITAL REGULATIONS

Hospitals are required to use New York's Version 7 DRGs. The Department also anticipates incorporating Medicare cost shifts on a prospective basis in 1990.

LOANS FOR WORKING CAPITAL

The Department is working with the New Jersey Health Care Facilities Financing Authority to get legislation passed that would permit the Authority to offer loans for working capital. Working capital loans may possibly be used to stabilize markup factors throughout the year. The Department indicated its intentions to include reasonable working capital interest payments in hospitals' reimbursable costs.

HEALTH CARE COSTS INCREASE

According to the research firm A. Foster Higgins, employer health care costs increased 16.5 percent in 1989. The study concluded that "managed care" health care plans failed to provide "cost-efficient services."

FRAUD AND ABUSE REGULATIONS

Health and Human Services (HHS) Office of the Inspector General (OIG) has drafted final rules amending the 1977 Medicare fraud and abuse law. The final fraud and abuse regulations that are awaiting HHS Secretary Louis Sullivan's approval contain dozens of provisions governing business arrangements that affect provider/patient relationships. Under the draft rules, hospitals would be allowed to waive Medicare beneficiary inpatient copayments and deductibles. Hospitals may not discriminate among inpatients in the waiving of copayments and deductibles on the basis of length of stay or type of disease. Hospitals that do discriminate or are found to claim the waived amounts as Medicare bad debts would be subject to civil or criminal enforcement actions by the OIG.

According to the OIG, copayment and deductible waivers are restricted to inpatient services since it is deemed not to affect the demand for such services. Nursing homes, home health agencies, and other cost based providers are barred from waiving of patient copayments and deductibles.

The rules, to be published this year, also include provisions dealing with joint ventures, lease arrangements, purchases of physician practices, and physician recruitment activities.

HMO UTILIZATION

According to a survey conducted by the Group Health Association of America (GHAA), the inpatient utilization rates in 1987 for HMO enrollees was significantly lower than the national average. According to the GHAA survey, HMO enrollees under age 65 used an average of 352 days of inpatient services per 1,000 enrollees versus a national average of 588 days. For those 65 and over, the HMO utilization was 1,690 days per 1,000 enrollees versus a national average of 3,030 days. HMO enrollees had an average length of stay of 4.7 days versus a national average of approximately 7.1; however, HMO enrollees on average had 4.8 physician visits per year versus a national average of 4.3. The GHAA attributes the utilization difference to HMO practice styles and population variances. The GHAA survey encompassed 259 HMOs with a total enrollment of approximately 20 million members.

MEDIGAP PREMIUMS

A General Accounting Office (GAO) study reports the ultimate repeal of the Medicare catastrophic coverage legislation would increase Medigap policy premiums. According to House Ways and Means Health Subcommittee Chairman Fortney A. (Pete) Stark, who released the study fact sheet, the repeal will be costly for the 24 million elderly Medigap policy holders. The study concludes that the cost of Medigap coverage will be more than the calendar year 1990 catastrophic premiums.

SEQUESTRATION INSTRUCTIONS

Carriers have been instructed by HCFA on the implementation of sequestration reduction in Part B payments mandated by the sequestration order signed into law on October 15, 1989, under the Gramm-Rudman-Hollings Act. The carriers were instructed to withhold 2.092 percent of all Part B payments for services and equipment. The increased withholding amount was necessary to achieve the 2 percent reduction for fiscal year 1990. The reduction is effective for services on or after October 17, 1989. The calculation of the portion of the charge subject to the Part B deductible is not affected by the payment reduction, but the charge on which the 20 percent coinsurance is based is subject to reduction.

PHYSICIAN PAYMENT REFORM

Health and Human Services has issued a lengthy report to Congress on issues related to physician payment reform. The report focuses on issues regarding the use of a relative value scale for physician reimbursement, the implementation of a national fee schedule, and increases in the volume/intensity of physician services. In the report, HHS discusses reservations about the proposed resource-based relative value scale (RBRVS) used in current reform proposals and recommends additional controls to reduce the expected growth in the volume and intensity not controlled by the RBRVS alone. In the report, HHS also indicated a preference for a lengthy phase-in of a national fee schedule, if enacted, after an advance notice of two years.

HMOs DROP FROM MEDICARE

According to HCFA, only four HMOs will drop out of Medicare in 1990, marking the smallest decline in HMO Medicare participation since the program began in 1985. The four HMOs have a total Medicare enrollment of about 11,000. In 1989, 32 HMOs covering 62,000 Medicare beneficiaries withdrew from the program. While acknowledging that HMO participation in Medicare is stabilizing, the Group Health Association of America called the HCFA information misleading. According to the GHAA another six HMOs covering more than 57,000 beneficiaries will convert to less comprehensive contracts in 1990. There are 196 HMOs participating in the Medicare program with an estimated enrollment of 1.82 million Medicare beneficiaries.

SOCCER ANYONE?

There are physicians who play soccer for fun and exercise. If you have a team that would like to play in the first U.S.A. Medical Tournament to be held in Houston in April 1990, contact the Houston Soccer Medical Association, 6565 DeMoss, Suite 230, Houston, TX 77074. In addition, there will be CME activities, a fashion show, and dinner dance.

FINI

"When you betray somebody else, you also betray yourself."

PROFESSIONAL LIABILITY

COMMUNICATING AFTER A MEDICAL COMPLICATION

A bad result during the course of medical care or treatment is distressing to both physician and patient. It can be difficult for a patient to understand that a bad result does not necessarily imply negligence. A clinician attending a patient who has a less than favorable outcome needs to be particularly careful to maintain the rapport he has established with the patient during the course of treatment. If the physician is able to respond sympathetically and nondefensively to the patient's concerns, he will diffuse much of the anger and confusion that often provoke the decision to bring a medical malpractice suit.

The following case summary is illustrative of two approaches to an unfortunate result and the impact each approach had on the patient's decision to bring suit:

CASE REPORT

Mrs. Patient, a 26-year-old gravida II para 0 with no significant prenatal problems, was admitted to labor and delivery at the end of her 39th week of pregnancy. Dr. Defendant, on call for the patient's obstetrician, had not seen the patient before, and Nurse Care, a hospital staff nurse, attended Mrs. Patient. Her labor progressed slowly and without difficulty, and Dr. Defendant told Nurse Care he would return to his office, close to the hospital, to attend to office patients and asked that she keep him advised of the patient's progress.

A telephone call was received by Dr. Defendant's office two hours later. Nurse Care told Dr. Defendant that Mrs. Patient was completely dilated and pushing. There were type III decelerations with pushing and the patient was turned on her side and given oxygen. Nurse Care explained that during several contractions prior to the telephone call, she noted the onset of a drop in the fetal heart rate to 100 and then lower to 80. The vertex was at approximately plus 2 station. Nurse Care asked the doctor to come to the hospital to evaluate the patient and Dr. Defendant advised Nurse Care that she should prepare the patient for immediate forceps delivery and transport her to the delivery room.

Dr. Defendant's examination in the delivery room revealed the vertex to be plus 1 to plus 2 station, with the patient completely dilated. Amniotic fluid was clear and the fetal heart rate was 65 to 70 beats per minute. The patient was prepped and draped and a rapid midforceps delivery was accomplished without difficulty.

The baby was born with no palpable heart rate, no spontaneous respirations, virtually no muscle tone, no reflex irritation, but some skin color. Apgar score at one minute was 1. The infant was immediately placed on the Air Shield Radiant Warmer and external cardiac massage was instituted. The infant was bagged via mask with 100 percent oxygen. Spontaneous heart rate of greater than 100 beats per minute resumed within 15 seconds of application of external cardiac massage and the infant pinked up. At the time of resuscitation, Dr. Right, the pediatrician, was summoned and he arrived immediately, assuming responsibility for further resuscitation.

The Apgar score at five minutes was 4. At 10 minutes, Apgar score was 5, and spontaneous sustained respirations had been established. The infant was transferred to another hospital's intensive care unit nursery.

The baby was found to have brain damage, resulting from proved hypoxia for 20 to 30 minutes prior to delivery. Presently, the child has cerebral palsy with spastic quadriplegia and athetosis. He requires extensive medical and rehabilitative care. Mr. and Mrs. Patient were devastated by the child's problems. Because Mrs. Patient had gone through a normal pregnancy she believed that either Dr. Defendant or Dr. Right was at fault and had caused her child's condition.

FOLLOWUP CARE

Soon after the delivery, Dr. Right, the pediatrician, met with Mr. and Mrs. Patient at length. He explained what had happened during labor and delivery, the problems the family could expect, and how he could help them from that point on. He finished the conversation by saying he was very sorry their baby had suffered complications, and that he would be pleased to provide any further services.

Dr. Defendant, who was aware the pediatrician had met with the parents, did not contact them after the delivery of their infant. He believed it was sufficient that the pediatrician had spoken with the parents. Three weeks later, he learned Mr. and Mrs. Patient wished to meet with him and he did so immediately. However, that meeting was evidently not satisfactory to the parents. Mrs. Patient brought suit against Dr. Defendant, but not against Dr. Right, stating she did not believe Dr. Right had been negligent because he had been so forthcoming and helpful immediately after the delivery. She felt Dr. Defendant had abandoned her after the delivery and that perhaps he had something to hide.

Although the jury ultimately rendered a defense verdict at trial, the case dragged on for five years and cost $300,000 to defend. While Dr. Defendant had not been negligent in his management of the case, he had failed to communicate effectively with Mrs. Patient and her family following the delivery.

INFORMED CONSENT

As previously noted, while unfortunate outcomes are a difficult part of professional practice, they do not necessarily warrant blame or litigation. While an explanation of a bad outcome may not always prevent blame or a lawsuit, a frank discussion of the problem within a reasonable time often helps to assuage the patient's feelings of anger and distrust. "Patients sometimes retain legal counsel specifically to investigate the cause of a problem or unsuccessful treatment, especially if they are distrustful because they did not have a timely and satisfactory discussion with the approximate health care professional," according to Dan J. Tennenhouse, MD, JR, FCLM (*Risk Prevention Skills*, 1988).

The informed consent process can help set the tone and prepare the patient for a difficult discussion after a disappointing result. When the physician provides the patient with the information necessary for informed consent, he not only is empowering that patient to make an educated decision, he also is preparing the patient for coping with possible complications and inviting the patient to be a part of the health care team. In doing so effectively, the physician can build a good doctor/patient relationship, that is invaluable if a problem or bad result occurs.

Just as a physician prepares the patient for the possibility of a bad outcome, the physician should prepare for his own reactions should the situation occur. It is helpful to plan what to do in the case of such an event before it happens, so that the physician can continue to provide effective treatment and keep good rapport with the patient.

Is an apology a good idea? An explanation is better. Many doctors are afraid to discuss a bad outcome, or even a tragedy, because an apology as such denotes blame or negligence. However, an expression of sorrow and sympathy implies neither personal responsibility nor negligence. A simple, "I am so sorry this happened," is a far cry from "I'm sorry, it was all my fault that you have these problems. It never should have happened." When a friend sustains a loss, such as a death in the family, it is customary to tell the person that you are sorry the loss occurred. It does not imply that you were at fault, but that you empathize with the unhappy time that the friend is experiencing. A sincere demonstration of empathy from a physician lets the patient know the doctor cares and is not unmoved by the outcome. When the clinician shares his feelings of sadness and frustration with all concerned, the patient and family are reminded that their doctor is indeed human, just like them.

SUMMARY

When a less than optimal outcome occurs, a plan of action is very important. It can be summarized in a few sentences: Recognize the patient's frustration and fear. Recognize your own feelings of disappointment and anxiety. Don't panic; keep lines of communication open. Express sorrow that the bad result occurred, but avoid faultfinding or fingerpointing. Explain the situation and your proposed plan of action in terms that the patient can understand. Keep the patient and family informed and involved in the subsequent treatment plans and decisions. (Reprinted with permission from *Claims RX*, NORCAL Mutual Insurance Co., San Francisco, CA, September 1989.)

NOT LIABLE FOR COVERING PHYSICIAN

A physician who asked another physician to cover for him was not liable for the covering physician's alleged malpractice, an Arizona appellate court ruled. After a patient had a dilation and curettage (D&C), the physician prescribed drugs to control pain and bleeding. The patient continued to suffer pain, bleeding, and fever, and called the physician twice after the operation. When she called a third time, the physician's answering service had the covering physician answer the call. The covering physician refilled the patient's prescriptions. The patient had an infection as a result of the D&C. About six days after she spoke to the covering physician, she was admitted to a hospital, where her entire reproductive system was removed.

The patient sued her original physician. The trial court instructed the jury that the referring physician was not liable for the negligence of the covering physician as long as he exercised reasonable care in selecting the covering physician. The court rendered a verdict for the physician.

On appeal, the court said that a physician was not liable for a substitute's negligence unless the substitute physician was in his employment or was his agent or partner or unless due care was not used in making the substitution. In the present case, there was no evidence that the covering physician was in the physician's employ or was his agent or partner and there was no evidence the physician was negligent in selecting the covering physician.

Since there was no legal or actual authority or control of the covering physician by the regular physician, the court found that no agency had been proved and affirmed the lower court's judgment. (Reprinted with permission from *The Citation,* AMA, Volume 59, October 1, 1989.)

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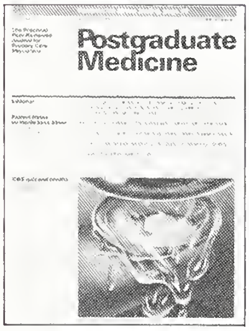

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The following is a brief summary. Before prescribing, please consult package insert.

INDICATIONS AND USAGE:

LEVOXINE (L-thyroxine) tablets are indicated as replacement or supplemental therapy for diminished or absent thyroid function, resulting from functional deficiency, primary atrophy, from partial or complete absence of the gland or from the effects of surgery, radiation or antithyroid agents. Therapy must be maintained continuously to control the symptoms of hypothyroidism.

CONTRAINDICATIONS:

L-thyroxine therapy is contraindicated in thyrotoxicosis, acute myocardial infarction and uncorrected adrenal insufficiency.

WARNINGS:

Drugs with thyroid hormone activity, alone or together with other therapeutic agents, have been used for the treatment of obesity. In euthyroid patients, doses within the range of daily hormonal requirements are ineffective for weight reduction. Larger doses may produce serious or even life-threatening manifestations of toxicity, particularly when given in association with sympathomimetic amines such as those used for anorectic effects.

PRECAUTIONS:

Caution must be exercised in the administration of this drug to patients with cardiovascular disease. Development of chest pains or other aggravation of the cardiovascular disease requires a reduction of dosage.

Patients on thyroid preparations and parents of children on thyroid therapy should be informed that replacement therapy is to be taken essentially for life. They should immediately report during the course of therapy any signs or symptoms of thyroid hormone toxicity, e.g., chest pains, increased pulse rate, palpitations, excessive sweating, heat intolerance, nervousness, or any other unusual event. In case of concomitant diabetes mellitus, the daily dosage of antidiabetic medication may need readjustment. In case of concomitant oral anticoagulant therapy, the prothrombin time should be measured frequently to determine if the dosage of oral anticoagulants is to be readjusted.

Partial loss of hair may be experienced by children in the first few months of thyroid therapy, but this is usually a transient phenomenon and later recovery is usually the rule.

Drug Interactions — In patients with diabetes mellitus, addition of thyroid hormone therapy may cause an increase in the required dosage of insulin or oral hypoglycemic agents.

Patients stabilized on oral anticoagulants who are found to require thyroid replacement therapy should be watched very closely when therapy is started.

Cholestyramine binds both T_4 and T_3 in the intestine, thus impairing absorption of these thyroid hormones. Four to five hours should elapse between administration of cholestyramine and thyroid hormones.

Estrogens tend to increase serum thyroxine-binding globulin (TBg). Patients without a functioning thyroid gland who are on thyroid replacement therapy may need to increase their thyroid dose if estrogens or estrogen-containing oral contraceptives are given.

Drug/Laboratory Test Interactions — The following drugs or moieties are known to interfere with laboratory tests performed on patients taking thyroid hormone: androgens, corticosteroids, estrogens, oral contraceptives containing estrogens, iodine-containing preparations, and the numerous preparations containing salicylates.

Carcinogenesis, Mutagenesis, And Impairment of Fertility — A reported apparent association between prolonged thyroid therapy and breast cancer has not been confirmed. No confirmatory long-term studies in animals have been performed to evaluate carcinogenic potential, mutagenicity, or impairment of fertility in either males or females.

Pregnancy-Category A — The clinical experience to date does not indicate any adverse effect on fetuses when thyroid hormones are administered to pregnant women.

Nursing Mothers — Minimal amounts of thyroid hormones are excreted in human milk. Thyroid is not associated with serious adverse reactions and does not have a known tumorigenic potential. However, caution should be exercised when thyroid is administered to a nursing woman.

Pediatric Use — The incidence of congenital hypothyroidism is relatively high. Routine determinations of serum (T_4) and/or TSH is strongly advised in neonates in view of the deleterious effects of thyroid deficiency on growth and development.

ADVERSE REACTIONS:

Adverse reactions are due to overdosage and are those of induced hyperthyroidism.

OVERDOSAGE — Excessive dosage of thyroid medication may result in symptoms of hyperthyroidism, which may not appear for one to three weeks after the dosage regimen is begun. The most common signs and symptoms of overdosage are weight loss, palpitation, nervousness, diarrhea or abdominal cramps, sweating, tachycardia, cardiac arrhythmias, angina pectoris, tremors, headache, insomnia, intolerance to heat and fever. If symptoms of overdosage appear, discontinue medication for several days and reinstitute treatment at a lower dosage level.

Complications as a result of the induced hypermetabolic state may include cardiac failure and death due to arrhythmia or failure.

Dosage should be reduced or therapy temporarily discontinued if signs and symptoms of overdosage appear.

Treatment of acute massive thyroid hormone overdosage is aimed at reducing gastrointestinal absorption of the drugs and counteracting central and peripheral effects, mainly those of increased sympathetic activity. Measures to control fever, hypoglycemia, or fluid loss should be instituted if needed.

DOSAGE FORMS AVAILABLE:

LEVOXINE (L-thyroxine) tablets are supplied as oval, color coded, potency marked tablets in 11 strengths: 12½ mcg (0.0125 mg) - maroon, 25 mcg (0.025 mg) - orange, 50 mcg (0.05 mg) - white, 75 mcg (0.075 mg) - purple, 100 mcg (0.1 mg) - yellow, 112 mcg (0.112 mg) - rose, 125 mcg (0.125 mg) - brown, 150 mcg (0.15 mg) - blue, 175 mcg (0.175 mg) - turquoise, 200 mcg (0.2 mg) - pink and 300 mcg (0.3 mg) - green, in bottles of 100 and 1000, and unit dose in cartons of 100 (10 strips of 10 tablets), 200 mcg and 500 mcg injectable (see injectable package insert).

PRESIDENT'S PAGE

STRATEGIC PLANNING

One of the most important goals for your Board of Trustees has been to revitalize and organize our process of long-range or strategic planning. In my speech to the House of Delegates last spring, I stated: "Strategic planning is a most important challenge. . . . We must look carefully and critically at ourselves, to see where we have been and where we should be going, and to prepare ourselves to anticipate and meet the challenges and opportunities of the future."

At the same time, I also stated: "I have directed our Long-Range Planning Committee to promptly begin a thorough and wide-ranging process of evaluation and planning." They have been working toward that goal for many months now.

What is long-range planning? It may be easier, at first, to state what it is not. It is not an attempt to predict the future; this at best, would be a fruitless task. Neither is it an attempt to make future decisions now, nor an attempt to simply program change.

Strategic planning (a better term than long-range planning) is a process of making decisions for today, that may affect us tomorrow. It is a process of providing continuity and consistency, or recognizing patterns, as well as a process of programming change. It is a process of dealing with today's problems today, so that we will be ready to deal with tomorrow's problems. Although we cannot make tomorrow's decisions, we must make decisions that will maintain our options.

An organization must consider what it may wish to do tomorrow, and how to maintain that option today. An organization must recognize needs and potential needs, and must plan the use of finite resources to attain those goals. An organization must set priorities and develop a strategic plan of action. Indeed, a strategic plan may be considered to be a set of priorities, for that year. By reviewing this annually, a dynamic process is created, determining whether new priorities have emerged.

Strategic planning is necessary if we are to understand our alternatives and maintain our options. The process is necessary if we are to substitute careful planning for reactive tactics. It is necessary if we are to minimize those crisis situations requiring crisis measures. It is a process of identifying our most important goals, committing our resources to these goals, and then monitoring and evaluating the result.

This process must be organized. It cannot "just happen." Our Board members are devoted to current agenda items. These sessions cannot reasonably deal with the strategic planning process within the time constraints of that monthly meeting, and within the context of an open structured meeting.

Furthermore, planning should not be limited to members of the Board of Trustees. An organization that limits strategic planning to a small group in the hierarchy is doomed to an elitist policy. With this in mind, our Committee on Long-Range Planning was restructured completely this year (the only Medical Society council or committee to undergo such a sweeping change). A chairman was selected who never has been a member of our Board of Trustees, but who has had significant experience with the strategic planning process. One current member of the Board of Trustees was selected and assigned to this Committee. One past-president of the Medical Society of New Jersey was selected and assigned to this Committee. One former member of the Committee on Long-Range Planning was reappointed. Other members of this Committee were selected for their representation of segments of our Society. This Committee on Long-Range Planning has been at work over past months, with the specific charge of developing the foundation for our plan, for presentation to the Board of Trustees.

That presentation is scheduled to take place in the near future, at a two-day long-range planning retreat, a time for the Board to temporarily set aside its concerns with our day-to-day problems, and look at the broader picture and the longer horizon. The Committee on Long-Range Planning will meet with the Board of Trustees at this session, and our session will be coordinated by a neutral "outside" facilitator. The Board will consider, and have the opportunity to alter or amend the plan; it will consider whether any change in our organizational structure is necessary to accomplish these goals; it will identify the responses needed to meet the goals.

It is our intent that the plan developed will be a workable plan. Indeed, an important part of the function of the retreat will be to develop a program to implement the strategy; and this may be even more difficult than developing the plan itself.

Finally, if the process is to be effective, it must be ongoing. We must continue to evaluate and re-evaluate our goals, our strategies, our successes, and our failures. We must continue to work formally with this process, and to update it at regular intervals. Only in this way will the Medical Society of New Jersey be most effective on behalf of all of its membership.

LETTERS TO THE PRESIDENT

The President of MSNJ welcomes letters from the physician community. Please address your comments to Dr. Paul J. Hirsch, Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648. ☐

EDITOR'S DESK

CAESAR'S WIFE

Can anyone be above suspicion when a charge of conflict of interest arises?

Can anyone be trusted without signing an affidavit of trustworthiness?

As we noted in the November 1989 issue of *NEW JERSEY MEDICINE,* all publications should attempt to insure the accuracy of their published materials. However, there is disagreement in the "how" as well as the "how far" authors could and should be pushed in the interests of accuracy.

The editors of three of the most prestigious United States journals, *New England Journal of Medicine, Annals of Internal Medicine,* and *Journal of the American Medical Association (JAMA),* along with others, continue to wrestle with measures to better assure their readerships the validity of articles in their publications.

In trying to reduce misrepresentations and fraud, Arnold S. Relman, MD, of *New England Journal of Medicine* expects prospective authors to disclose any "commercial interests" that might produce conflict of interest. He also intends to have them attest, in writing, to the integrity of their work.

The *Annals of Internal Medicine* and its editor, Edward J. Huth, MD, require an agreement be signed before publication can be considered. This is to affirm the exclusivity of the manuscript to the *Annals,* that those listed as authors were truly such and will assume responsibility for the work, that any prior publication of the material, even in part, is disclosed, and that all necessary informed consents have been obtained.

George D. Lundberg, MD, of *JAMA*, goes further. He will have authors certify not only that they will divulge possible conflicts of interest and that they are responsible for the reliability of the work, but also, most uniquely, that they will surrender their raw data upon request.

Dr. Lundberg's proposal has been criticized as being too naive—the true rascal can manufacture false data just as easily as he can falsify the final manuscript. The signature written by such a scoundrel is worth nothing, and scrutinizing faked data undoubtedly will lead the editorial staff to erroneous conclusions.

There are other risks associated with the "Lundberg Policy." Like it or not, intended or not, *JAMA* now will become the guarantor of its published materials, regardless of the extent of presubmission review by sponsoring institutions. Should an article(s) later prove to be false or, much worse, fraudulent, *JAMA* will bear responsibility and guilt equal to that of the authors. Additionally, it may become necessary for *JAMA* to have a statistician review every manuscript, not just selected ones, thus greatly increasing the cost of review and delaying the timeliness of publication.

The "Lundberg Policy" also carries negative connotations. It reminds us of other efforts at attestation, past and present, that have raised the hackles of much of society, including the physician community. Today's demeaning, and probably worthless, mandate for attestation in Medicare cases is reminiscent of other worthless affidavits, e.g. honor code pledges and anticommunist loyalty oaths. None is worth the paper on which the ink resides. The honorable person is affronted; the dishonorable one couldn't care less. What do we mean by trust?

Nevertheless, we should continue our efforts to prevent false reporting and fraud. We have little quarrel with attempts to insure disclosure of potential commercial conflicts of interest. Dr. Lundberg's proposal is noble, but misguided, to coin a phrase. It is impetuous and premature. We feel that publications should join forces in a collaborative effort, rather than flying solo. It is time to reach consensus on what is best for author and reader. We suggest a conference whose participants include editors of both large and small publications, members of prominent think tanks, educators, and (necessarily, albeit reluctantly) representative(s) of the governmental agencies that fund much of the research.

Dr. Lundberg should not have to fear that *JAMA* may not be able to "compete" with other journals for manuscripts because of his stringent new guidelines. Nor, conversely, should other journals risk denigration because they do not, at least superficially, "guarantee" the same quality of review as *JAMA*; and this worry is not a good reason for others to adopt the rash and precipitous "Lundberg Policy." Individuality is fine and some variation is to be expected, but there should be agreement on basic standards for medical and scientific publications.

JOURNAL ARTICLES

With the tremendous increase in research being performed in New Jersey, the Committee on Publication voted to increase the documentation on research published in *NEW JERSEY MEDICINE.* As of the January 1990 issue of our journal, all articles include the date the article was received and the date of acceptance by *NEW JERSEY MEDICINE.* The Committee believes this policy will give authors more appropriate credit for their original research and provide for timeliness of reporting of the work being done in New Jersey. ☐

BOOK REVIEWS

OTOLARYNGIC ALLERGY AND IMMUNOLOGY

Helen F. Krause, MD. Philadelphia, PA, W.B. Saunders Co., 1989. The text provides a superficial overview of the immune system as it relates to the practicing otolaryngologist. A redeeming nature to the book is the color photographs, detailed photomicrographs, x-rays, and detailed pictures. However, the authors of the various chapters basically are from the clinical setting, i.e. private practitioners with clinical appointments. The scientific basis to several of the discussed techniques is superficial and sometimes elementary (figure 21-1, page 156). A major strong point of this text is that it offers the surgically oriented alternative to allergic disorders. In general, there are several other good "allergy texts" that provide a more indepth reading and understanding in the various areas. However, for a general practitioner not wishing to pursue such an in-depth analysis, this text would provide an easy introduction into the area. ☐ Leonard Bielory, MD

PEDIATRIC EXERCISE SCIENCE

Thomas J. Rowland, MD (ed). Champaign, IL, Human Kinetics Publishers, Inc., 1989. This is the initial issue of what apparently is a new journal of the North American Society of Pediatric Medicine. The stated purpose of the journal is to increase the understanding of exercise in children and adolescents, i.e. how participation in sports affects the mental and physiological growth in both healthy and chronically ill or handicapped children. The first issue contains excerpts and review articles from relevant literature as well as four research articles on topics such as children's gait, relative endurance, characteristics of female swimmers, and a pure basic science paper. The journal is intended for pediatricians and basic physical educators in the fields of biomechanics and exercise physiology. The articles are well edited and readable. For those interested in the field of sports medicine, this appears to be a useful journal. ☐ Christine E. Haycock, MD

PRIMER OF DERMATOPATHOLOGY

AF Hood, MD, TH Kwan, MD, DC Burnes, MD, MC Mihm, Jr, MD. Boston, MA, Little, Brown & Co., 1984. This softcover, glossy paged book is precisely what its title proclaims. It presents a systematic approach to the differential diagnosis of microscopic sections of most skin diseases. The reader is instructed how to examine the material on the slide and how to recognize and categorize patterns of abnormality. The book then is arranged in chapters and sections which correspond to such major morphologic characteristics, e.g. epidermis—vesicles and bullae, hyperplasias, atrophies, dermis—perivascular infiltrates, upper or reticular dermis, diffuse infiltrates. Each condition or disease is described as a list of diagnostic features rather than a narrative text. Accompanying black-and-white photomicrographs, and very useful line drawings demonstrate representative findings. There are very few comments related to the clinical condition, rather, the reader is provided a list of selected references at the end of each chapter. The book will be a helpful lamp for those taking their first unsure steps into the mysterious terrain of dermatopathology. ☐ Christopher M. Papa, MD

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LETTERS & VIEWPOINTS

CESAREAN SECTION RATES

The following letters concern the problem of the increasing rate of cesarean sections in New Jersey. The first letter is from a New Jersey obstetrician, and the response to his letter was written by Commissioner of Health Molly Joel Coye.

REDUCING THE C-SECTION RATE

I am writing in response to Dr. Coye's letter of October 1989, addressed to "All Hospital CEOs," concerning cesarean section rates in the state of New Jersey. I am a practicing obstetrician in the state of New Jersey and have a very active practice.

My colleagues and myself are forced to choose between two possible explanations for Dr. Coye's recent actions, either she does not truly wish to solve the cesarean birth rate problem or she is ignorant of the facts as they exist. It would appear that her motives are political in nature. Instead of attempting to seriously solve the problem, she is looking for a scapegoat, and we all know who that will be.

Her plan to release this information to the public will not, as she is fully aware, "foster a greater physician and patient communication on this issue," but will fuel additional public confusion and further destroy an already tarnished physician-patient relationship.

She states that "a concerted effort must be made if we are to reduce this rate to a more appropriate level." I agree wholeheartedly. However, if Dr. Coye and the state are truly interested in reducing the cesarean birth rate in the state, then she would abandon this charade and address the real cause for the high cesarean birth rates in this state and in the country as a whole. The overwhelming reason why cesarean birth rates are so high in this state is based solely on the horrendous medical-legal situation that exists. I hope this comes as no surprise to Dr. Coye. Until this problem is resolved, cesarean birth rates never will be significantly reduced and may rise even higher. □ John R. O'Neal, MD

C-SECTION REDUCTION PROJECT

I appreciate the concerns of Dr. O'Neal and the time he has taken to express his thoughts on this matter. I know that we both share the same goal of healthy mothers having healthy babies.

However, I think it is important to clarify the goals of the c-section reduction project and to point out the encouraging support and participation we have received from obstetricians, hospital administrators, nurse midwives, nurses, insurers, and others who are part of the maternal health care delivery system in New Jersey.

The rising rate of cesarean sections is due to a multitude of factors and will not be stemmed, or ultimately reduced, by attempting to fix blame on any one group, institution, or practice. The problem of obstetrical liability has remained relatively constant for more than a decade, while cesarean sections have increased markedly. In fact, the most successful efforts to reduce the c-section rate specifically assist the physician in providing clear protocols and opportunities for supporting opinions. Clearly, the literature demonstrates that c-section reduction projects can be developed and achieve marked success even in the absence of changes to the malpractice system.

On December 12, 1989, the Department of Health and Blue Cross/Blue Shield of New Jersey cosponsored a conference on improving pregnancy outcomes. The conference focused on the rising c-section rate and examined the multiple factors responsible for increased rate. I am pleased to say that the conference was well attended by obstetricians, hospital personnel, and other key parties who have conducted a responsible, objective review of the issue and will participate in formulating constructive programs aimed at reducing the rate of cesarean births. During the course of the conference, it was clear that no single group was the cause of the problem, and that solving the problem will require the concerted efforts of all these groups.

I want to assure you that it never has been my intention to look for a "scapegoat" or to "fuel public confusion" about this issue. I do believe that the public interest will be served through an open and honest examination of the issue and a multidisciplinary approach to problem solving. Obviously, patient education is critical in order to reduce this source of pressure upon physicians to perform c-sections. Obstetricians will need the support of their patients, hospitals, and peers, as well as their malpractice carriers, if the number of medically unnecessary cesarean sections performed in New Jersey is to be reduced. ☐ Molly Joel Coye, MD, MPH

DO WE NEED PACs?

I applaud Dr. Edward G. Bourns, who has written in these pages, of his belief that PACs are not morally right, and who is uncomfortable with physicians buying influence and votes through contributions to state and federal legislators. The response of the president of our Society in the same issue (volume 86, page 845) attempts to justify the contrary position, borne of an intense sense of frustration with the manner in which our profession is being treated, and accepting a philosophy of, "If you can't fight 'em, join 'em." Since it is expensive to run a campaign, he reasons, we have an obligation to send money to those candidates whose election will assure friendly votes.

Surely, this is a subversion of the democratic ideal and visions of our forefathers. To encourage the philosophy of a legislature for sale to the highest bidder is to advocate the end of democracy. If PACs continue unfettered, no matter how much money we give, control of the legislative process will belong to those with more money and greater numbers than the medical profession, and we will be as unsuccessful in promoting our agenda as we are now, for we can be outspent by most of corporate America, and the price of purchasing a legislator will rise beyond our ability to pay.

Obviously, I believe we should do away with all PACs. Dr. Bourns and I are naive in believing that physicians, through their traditional roles as teachers, can stem the tide of political abuse and bring enlightenment back to government. But, I submit, there is no ethical way that is consistent with the ideals of our profession and that honors the values and ideals used to set our country apart.

We, as physicians, individually and through our leadership, must grapple with the dilemma of how best to deal with opponents who do not play according to the rules we honor and respect. I submit that to step down into the arena of political slugfest will demean and destroy our professional standing and ethical reputations, as surely as we perceive the present legislative process to be threatening the health of our patients and of our own finances. If we maintain the high road, we might lose some battles in the long run, but we will win the wars. ☐ Robert A. Goldstone, MD

WHY PACs ARE NEEDED

The idea of contributing money to the election of our representatives is anathema to many individuals, although it is a well-entrenched part of the American scene.

Allow one with mixed feelings about the process to make some observations, without taking sides:

- Some of the motives ascribed to the president of our Society are untrue and unwarranted, based on careful reading of the President's Page on page 845 of the November 1989 issue of *NEW JERSEY MEDICINE.* This is unfair, to say the least.
- Many people believe in a free-market approach to include PACs and other groups, as being in the American tradition.
- The United States Supreme Court already has struck down a limit on spending as being an unconstitutional infringement of free speech.
- Special interest money tends to continue flowing. Dam one channel; another will open.
- Some feel that spending money to advertise one's position to candidates is not different from other ethical forms of advertising. (We can debate the overall ethics of advertising another time.)
- Other proposals to assure better representation at all governmental levels may be more productive. They include limited terms of office, control of franking privileges, proscription of dual-elected positions, etc.

The entire electoral process, including the legality of PACs, continues to frustrate. This is not new; two generations ago Will Rogers said politics had become "so expensive it takes lots of money to even get beat with." It would indeed be rewarding if we could always take the "high road" and have merit receive its just reward, but "putting your money where your mouth is" represents, to many, a cherished part of our culture. ☐ Howard D. Slobodien, MD, Editor-in-Chief

LETTERS TO THE EDITOR

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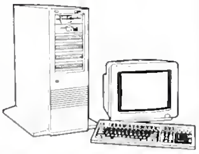

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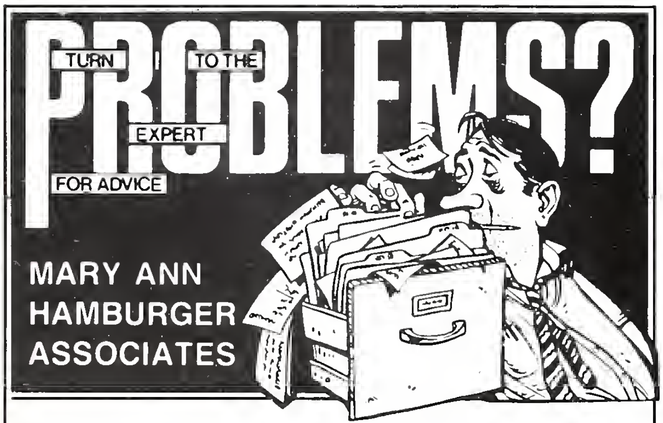

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Sexual Harassment and Discrimination

Impact on Physical and Mental Health

DIANE K. SHRIER, MD

The Committee on Women of the New Jersey Psychiatric Association recently has surveyed materials in the literature and policies and procedures from a number of New Jersey and other corporate and academic programs relating to sexual harassment and sexual discrimination in the workplace, academia, and medicine. In educating ourselves on this important issue, we became aware of its widespread prevalence and the often serious health (including psychiatric) consequences for its victims. The American Psychiatric Association has a position statement on sexual harassment and other forms of gender-based employment discrimination.[1] The American Medical Association's House of Delegates recently approved a study on the pervasiveness of sexual harassment and sexual exploitation of medical trainees by their faculty supervisors and their resulting ethical, health, and psychosocial problems.[2] While sexual harassment and sexual discrimination also is experienced by men and by homosexuals, the vast majority of victims are women. This article, therefore, will focus on the experiences of women. Sexual harassment and sexual discrimination will be defined. Its prevalence, commonly manifested physical and emotional symptoms and syndromes, options available to victims and the potential hazards associated with exercising these options will be discussed. A partial list of resources will be presented. We hope to alert New Jersey medical practitioners to this serious health problem, that has many similarities to spouse abuse, sexual molestation, and other victimization occurrences.

DEFINITIONS

Sexual discrimination in the workplace, prohibited under the 1964 Civil Rights Act, is manifested by differential hiring, work assignments, salaries, promotions and other conditions of work based on sex,[3-5] including "exclusion from social and peer networks in which business occurs, information is shared, or decisions are made."[6]

Sexual harassment is a specific type of sexual discrimination. Harassment ranges from unwelcome sexual advances such as pressure for dates, sexually suggestive remarks, teasing, jokes, or gestures; requests and pressure for sexual favors through words, letters, or phone calls; and other verbal or physical conduct of a sexual nature such as deliberate touching, cornering, pinching, actual or attempted rape, or assault.[6]

PREVALENCE

While overt sex discrimination in the workplace is much reduced since the 1960s, subtle and covert discrimination persists; women continue to make, on average, no more than 60 cents for every dollar men earn. Women in university and in medical school settings remain in the lower ranks of administration and faculty levels and, on average, are paid substantially lower salaries than men in comparable positions despite comparable academic performance.[7] Sexual harassment is widespread and often severe

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in nature. One of the best studies was a 1981 random survey of federal government employees, where 85 percent responded. Of the more than 10,000 women who replied, 62 percent reported having experienced sexual harassment such as sexual touching and 20 percent reported actual or attempted rape or assault on the job. Also, 42 percent reported that they had been sexually harassed on the job in the two years prior to the survey.[6]

IMPACT

Such widespread sexual discrimination and sexual harassment against women in the workplace and academia has significant and serious economic, psychiatric, and stress-related health consequences. Crull conducted a study at The Working Women's Institute of New York in 1981, using a nonrandomly selected sample. Crull found 66 percent of the women studied either had left jobs where they were harassed (42 percent) or were fired (24 percent), either as retaliation for complaining about the harassment or because of deterioration of performance as a consequence of the harassment.[8] Another survey using a random-sample found 25 percent of the women studied either had changed jobs under duress, endured adverse working conditions, or suffered diminished opportunities for advancement as a consequence of sexual harassment.[6]

Whether or not women left or lost their jobs due to sexual harassment, the stress-related effects on job performance, emotional well-being, and physical health were pervasive and debilitating. In the nonrandom survey of clients of The Working Women's Institute of New York, 75 percent of the women reported adverse effects on their job performance, such as: inability to concentrate, reduction in confidence in their skills and accomplishments, and loss of motivation due to retaliation for their refusal to make themselves sexually available.[8] Ninety percent of the sample and 95 percent of a prior preliminary survey conducted by The Working Women's Institute reported psychological stress symptoms such as general tension or nervousness, persistent anger, fear, and helplessness.[9] Such symptoms resemble those found in victims of incest, rape, and other traumatic experiences. Some of the psychological effects include symptoms also found in the following *DSM-IIIR* diagnoses: post-traumatic stress disorder; major affective disorder, depressive type; dysthymic disorder; and adjustment disorder.[10] Some women experience flashbacks, reawakening of memories, and reactive physical and emotional symptoms of prior experiences of victimization. When one considers that more than 40 percent of women in Russell's well-designed random survey reported having been victims of sexual abuse, rape, or incest prior to age 18 with similarly high rates in adult life, one can see how sexual harassment experiences could compound prior victimization effects for a large number of women.[11]

Table. ***Additional Resources.***

The Association of American Medical Colleges Women in Medicine Coordinating Committee, One Dupont Circle, NW, Washington, D.C. 20036. Developed an annotated bibliography on sexual harassment useful for both the woman victim and the health care practitioner.

Jean Hamilton, MD, Institute for Research on Women's Health, 1616 18th Street NW, Washington DC 20009. Coordinated additional information on sexual harassment and discrimination and recommendations on working with knowledgeable attorneys.

The Association of Women Psychiatrists, University of Louisville School of Medicine, Louisville, KY 40292. Established a legal network of members with particular interest and expertise in areas of forensic psychiatry relating to women.

Committee on Women of the New Jersey Psychiatric Association, 1394 Mt. Vernon Road, Bridgewater, NJ 08807. Members Drs. Rose Prystowsky, Annette Hollander, Jane Sofair, and Diane Shrier compiled the information used in this paper and would be available as resources.

Sixty-three percent of Crull's sample reported physical symptoms associated with the sexual harassment, most commonly nausea, headache, and chronic fatigue.[8] A number of these women sought medical consultation for their symptoms, but they rarely were identified as being related to their adverse job experiences. Increased use of alcohol and other prescription or nonprescription drugs may occur in efforts to reduce stress-related symptoms.

A number of research studies have confirmed the adverse stress-related health effects of various life changes. Eight items of the 43-item "Social Readjustment Scale" developed by Holmes pertain to employment effects commonly experienced by sexual harassment victims.[12] These include: major change in working hours or conditions; troubles with the boss; major change in responsibilities at work; changing to a different line of work; major change in financial state; major business readjustment; retirement from work; and being fired.

OPTIONS AND THEIR EFFECTS

Many corporate, university, and medical institutions have specific policies and procedures in regard to sexual harassment and sexual discrimination.

However, women attempting to report incidents of sexual harassment all too often have had a compounding of the adverse job, physical, and mental health effects of the original victimization experiences. When one becomes a "whistle-blower,"[13] the institution is likely to defend itself in a variety of ways including: denying that harassment occurred, or denying that it was intentional, or claiming that the woman brought it on herself, or insisting that the positive attributes of the harasser outweigh the impact of the harassment and, thus, action should not be taken.[3] Coworkers typically refuse to come forward with corroborating information previously given in private. Retaliation against the victim by her superiors for reporting sexual harassment is likely to occur with devaluing and criticizing of her work and reassigning important work to others, leading to an often increasingly intolerable work situation. Family and friends typically "blame" the victim, disbelieve her, and fail to support her efforts to fight against sexual harassment.[3]

The added stress and strain, that typically follow the reporting of sexual harassment, are likely to increase the emotional and physical health hazards of the original victimization. The physician or counselor to whom the woman turns for help must be particularly careful not to confuse the effects of the victimization with its causes. The patient may initially present with intense affective and behavioral symptoms and "may appear extremely unstable, histrionic, paranoid, or depressed."[3] These symptoms are common responses to severe harassment and discrimination. Empathy, validation of the woman's experience, and helping her to resist devaluing herself are important first steps in reversing the adverse effects. Identifying the source of the physical and emotional symptoms as a reaction to sexual harassment and discrimination can be useful, as well as exploring the impact of such experiences on marital and family life.

Referral for individual and/or group supportive counseling to psychiatrists or other mental health practitioners with expertise in this area can also prove helpful. Interventions by the therapist should be active and supportive and should provide information about common emotional, physical, economic, and family effects of harassment, the victim's options for dealing with this situation, and the potential risks associated with doing so. The therapist needs to encourage the woman to develop constructive assertive coping approaches and to avoid inappropriate angry and hurt reactions in the workplace which might increase the likelihood of "victim-blaming" by coworkers and superiors. Continuing assessment of supportive relationships and the effects of the experience on family is important, as is monitoring the woman's use of maladaptive approaches to stress management, such as the inappropriate use of alcohol or prescription or nonprescription drugs.[3] A psychiatric or other medical practitioner or mental health counselor may need to give additional support to the victim of sexual harassment by providing expert testimony in court.

SUMMARY

Sexual harassment and sexual discrimination continue to be pervasive problems for women in business, academia, and medicine, with widespread and often serious health, emotional, and economic consequences. It is important that health care providers become aware of the common physical and emotional symptoms associated with these victimization experiences and serve as supportive and informed resources to their patients. ■

Submitted: April 1989;
Accepted: September 1989

REFERENCES

1. Hamilton JA: Position statement of sexual harassment and other forms of gender-based employment discrimination as significant occupational stressors. Submitted to the Occupational Psychiatry Committee of the American Psychiatric Association, 1987.
2. Symonds A: News for women in psychiatry. Association for Women in Psychiatry 7:8, 1989.
3. Hamilton JA, Alagna SW, King LS, Lloyd C: The emotional consequences of gender-based abuse in the workplace: New counseling programs for sex discrimination, in Brande N, *Women, Power, and Therapy.* New York, NY, Haworth Press, 1987, 155-182.
4. Pendergrass VE, Kimmel E, Joesling J, et al.: Sex discrimination counseling. *Am Psychologist* 31:36-46, 1976.
5. Dolkart JL: Discrimination on the job, in Burnett BA, *Every Woman's Legal Guide.* New York, NY, Doubleday, 1983, pp. 277-316.
6. U.S. Merit Systems Protection Board: *Sexual Harassment in the Federal Workplace: Is It a Problem?* Washington, DC, U.S. Government Printing Office, 1981.
7. Symonds A: News for women in psychiatry. Association for Women in Psychiatry 6:2, 1988.
8. Crull P: The stress effects of sexual harassment on the job. *Am J Orthopsychiat* 52:539-544, 1982.
9. The Working Women's Institute: *Sexual harassment on the job: Results of a preliminary survey. Research Series, Report No. 1.* New York, NY, The Working Women's Institute, 1975.
10. *Diagnostic and Statistical Manual of Mental Disorders Third Edition.* Washington, DC, American Psychiatric Association, revised 1987.
11. Russell DEH: *Sexual Exploitation, Rape, Child Sexual Abuse and Workplace Harassment.* Beverly Hills, CA, Sage Publications, 1984.
12. Holmes TH: Life situations, emotions, and disease. *Psychosomatics* 19:747-754, 1978.
13. Glazer M: Ten whistleblowers and how they fared. *Hastings Center Report* 12:33-40, 1983.

Mesmer and His Critics

DANIEL PARISH

The Medical History Society of New Jersey awarded the Stephen Wickes Prize in the History of Medicine to this original essay on Franz Anton Mesmer. Mesmer, the controversial Austrian doctor, was known for his theory of animal magnetism.

Few characters in history are as controversial as the Austrian doctor Franz Anton Mesmer. His theory of animal magnetism, that there is a universal fluid which is the determinant of all health, made him one of the most popular and most vilified doctors in late 18th century Europe.

Mesmer appears as a misguided researcher at best, and as a greedy charlatan at worst. He is a physician who probably plagiarized his medical dissertation, and a discoverer whose greatest contribution was "to give a name [animal magnetism] to a supposed occult influence about which many others had written."[1]

But if Mesmer was derivative, somewhat dishonest, and largely wrong, his 18th century detractors often were no better, and, on occasion, were worse. The pompous members of the great Austrian and French medical and scientific societies did not reject Mesmer as much for his beliefs as they did for his challenge to their hegemony.

Mesmer was born on May 23, 1734, in the small German town of Iznang on Lake Constance. His early education was in Jesuit institutions, and his first degree, received in 1755 from the University of Ingolstadt, was in theology. Mesmer's activities between 1755 and 1759 are unknown, but by the time he entered the University of Vienna in 1759, he was ascribing to himself the title of Doctor of Philosophy. It is uncertain that he actually earned this title.[2]

He pursued a degree in law for a year before finally deciding to become a physician, and then spent the next six years studying medicine. Despite prevailing trends in the University away from "cosmic" medicine, Mesmer became fascinated with the stars and astronomy and read the works of Paracelsus extensively. In 1766, he wrote his medical dissertation, "The Influence of the Planets on the Body," a work which reflected these interests. The dissertation, however, totals only 48 unremarkable pages, and, if not actually plagiarized, was highly unoriginal.[2] His central thesis was a virtual replication of Richard Mead's 1794 treatise; for example, 22 of Mesmer's 23 clinical studies were drawn from Mead's work,

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although they were not attributed to it. Regardless, "none of the medical faculty considered his ideas seriously," and Mesmer did not attract much attention until 1774.[3]

Mesmer's discovery of animal magnetism came between 1774 and 1775. Working on his theory of "animal gravity" as developed in his dissertation, Mesmer became impressed with the work Father Hell, a professor of astronomy at the University of Vienna, had done with loadstones (magnets) and wanted to use them for his own experiments.

Mesmer believed a single universal fluid was the source of all health, and that a magnet could control the fluid's influence on disease; he had discussed this in his dissertation. This fluid supposedly flowed undisturbed through healthy people but moved improperly or was congested in the sick. The final goal of his medical treatment was to restore the normal flow of this fluid. Before a patient could be cured, he would have to be overwhelmed with an excitement of the fluids within him, much like having a dam burst within the patient. This would result in a violent quickening of the disease (called a 'crisis'), a momentary surge of pain or a fit, and then calm. Hell agreed to supply Mesmer with magnets. His thesis, "there is only one illness and one cure," directed his work from 1774 onwards.[4]

Mesmer also had been consulting with J.J. Gassner, a Swabian faith healer, and learned that one did not need magnets to control the flow of this fluid. This discovery finally induced Mesmer to change his theory from 'mineral' to 'animal' magnetism.

Mesmer's first successful use of magnets and animal magnetism was on Franzl Oesterlin. Beginning in 1773, he treated her and observed her crises and eventual recovery. In a letter dated January 25, 1775, he announced for the first time that he had confirmed the existence of animal magnetism, but he did not publish his seminal work, "On the Discovery of Animal Magnetism," until 1779.

The Viennese Faculty of Medicine, which looked upon Mesmer's associations with Hell and Gassner as distasteful, was alarmed at his new method of treatment, which to them wreaked of spiritualism and the occult. The Faculty was determined to expose Mesmer; they could not expel him from Vienna, but pressured him to leave for Paris in 1778, after his well-publicized attempt to treat a blind pianist, a protegé of the Empress Maria Theresa, failed.[5]

Mesmer's arrival in Paris was soon followed by an invitation from the Academy of Science to present his theory before them. This monolithic body, which had dominated French scientific life since 1666, decided both he and it were worthless. Following this failure, Mesmer invited patients to a retreat at Creteil and offered to present the results of his treatments there to the Academy. This failed to win official approval. Finally, Mesmer won over one member of the Faculty of Medicine, Charles Deslon.

After that first conversion, Mesmer and his theories rapidly achieved an immense popularity. Deslon gave Mesmer an inroad to the Queen, Marie Antoinette, who came to believe in animal magnetism and thereby gave the theory a vogue at court. Mesmer then published the popular "On the Discovery of Animal Magnetism." Mesmer captured the attentions of the salon set in Paris.

While the major scientific authorities were convinced that Mesmer was a fraud, more and more people came to regard him as a medical savior. He did spectacular things and, often enough, had spectacular results, but this had little to do with the magnets and everything to do with the power of suggestion. Mesmer's growing band of wealthy and powerful supporters, however, did not know or care.

The controversy came to a head in 1784. Mesmer and animal magnetism had become the rage of Paris, arousing even more excitement than the first hot air balloon flight in 1783. The *Journal de Bruxelles* went so far as to speculate that mesmerism "soon will be the sole universal medicine."[6]

In March, Louis XVI ordered a commission set up to investigate animal magnetism. The commission was composed of men no less famous than Mesmer himself. On it sat five members of the Faculty of Medicine of Paris and five of the Royal Academy of Sciences. The king also allowed the Royal Society of Medicine to establish a board and make a report. The Society, a younger rival of the more prestigious Faculty, wanted its own say, and it was simply easier to let them have it.

M. Thouret of the Royal Society, for example, had already written a book condemning Mesmer, and he was out for blood. Indeed, the official reason for the report was that Deslon had been threatened with expulsion from the Faculty of Medicine. And for that reason, committee members did not actually investigate Mesmer, but rather they challenged Deslon. Mesmer, in fact, was absent at his own trial.

The first step of the committee was to investigate the baquet of Deslon and to see how it worked. When they decided that the confusion of 50 or so people being magnetized and in crisis would be unconducive to scientific investigation, they had Deslon come to commission member Benjamin Franklin's house in Passy, outside of Paris, to show his treatments. Fourteen sick individuals "such as could not be suspected of sinister views"[7] were brought there and treated with magnetism. Of the 14 persons, only 5 persons said that they felt anything at all. The commissioners then rationalized the 5 persons as false anyway, even declaring one person to be a poor man who probably "thinks he shall contribute more to our satisfaction by professing to experience sensations of some kind."[7]

The next round of experiments took place at the home of M. Jumelin, neither a student of Mesmer nor Deslon, but one who professed to understand animal magnetism. Experiments on eight men and two women failed to produce any positive results.

Back at Franklin's house, the commissioners had Deslon magnetize one tree. A boy then was led to four other unmagnetized trees. At each tree, he became successively worse until falling into a crisis. When the boy was led to the magnetized trees after recovering, he felt nothing. The commissioners also presented a tray full of china bowls to a woman; she had been told some of the bowls had been magnetized (none of them actually had been). She picked up four bowls in succession. When she held the second one, she began to feel symptoms. After grasping the fourth, she fell into a crisis. The commissioners offered her a drink of water from another bowl to relax her. From this one, which had been magnetized, she drank without difficulty.

After a few more experiments, a published report condemned animal magnetism. A secret second one, written for the king's eyes only by the same group, declared mesmerism to be morally repugnant and dangerous. A third one, prepared by members of the Royal Society of Medicine's commission, attacked animal magnetism too. All conclusions were similar: "Compression, imagination, and imitation are therefore the true causes of the effects attributed to this new agent, known by the appellation of animal magnetism."[7]

Yet, it is an overstatement to declare Mesmer's "fate as a scientist was sealed, and his theories discredited."[8] In a letter to Jan Ingenhousz dated April 29, 1785, Franklin wrote, "Mesmer continues here and has still some adherents and some practice. It is surprising how much credulity still subsists in the world. I suppose all the physicians in France put together have not made so much money during the time he has been here, as he has done."[9] Hundreds of pamphlets from supporters defending Mesmer and animal magnetism and attacking the commission report appeared in 1784 and 1785. Though the committee was not nearly as dishonest as some critics have implied, it was biased. The report had not denied Mesmer's successes, but only his concept of disease. In 1831, a second committee investigating animal magnetism would concede suggestion and the trance as useful to medicine, but in 1784, no such leap could be made by either side.

Mesmer's influence and popularity crested in 1784. Eight years later he left Paris, the great fortune he had accumulated in his heyday having been largely dissipated, and returned to Lake Constance, where he remained until his death on March 5, 1815.

Animal magnetism, and the new term "mesmerism," did not fade away. Elisha Perkins aroused a great furor in the United States in the 1790s with a remarkable device called a tractor and "a stroking reminiscent of Mesmer's animal magnetism."[10] Mesmerism was carried on by the Society of Harmony in France and experienced a revival in Britain in the 1840s and 1850s. By the late 1800s, however, animal magnetism already had lost much of its original meaning.

Although animal magnetism and mesmerism appear pseudoscientific today, they were grounded in enough science to be accepted by many as scientific—not all the followers were quacks. Newton himself had pondered over a "subtle spirit" which pervaded all things, and many doctors, including some on the commission, believed this. There was something important in what Mesmer was doing, but the commission, in its haste to condemn him, overlooked the fact that many had been cured; the discovery of hypnosis had to wait 60 years. Most criticized Mesmer on the basis of his deviance from scientific dogma which had many faults of its own. To a large degree, the academies had replaced the papacy in condemning scientific heresy. Arrogance and jealousy, not a search for rational truth, were the greatest contributing factors to Mesmer's decline. ■

Submitted: October 1988;
Accepted: September 1989

REFERENCES

1. Horine EF: *Charles Caldwell, MD.* Brooks, KY, High Acres Press, 1960.
2. Pattie FA: Mesmer's medical dissertation and its debt to Mead's de imperio solis ac lunae. *Hist Med* 11:276-281, 1956.
3. Wyckoff J: *Franz Anton Mesmer: Between God and Devil.* Englewood Cliffs, NJ, Prentice Hall, 1975.
4. Mesmer FA: *Maxims on Animal Magnetism.* Mt. Vernon, NY, The Eden Press, 1957.
5. Walmsley DM: *Anton Mesmer.* London, England, Robert Hale, 1967.
6. Darnton R: *Mesmerism and the End of the Enlightenment in France.* Cambridge, MA, Harvard, 1968.
7. *Report of Dr. Franklin and other Commissioners.* London, England, J. Johnson, 1785.
8. Hahn R: *The Anatomy of a Scientific Institution: The Paris Academy of Sciences, 1666-1803.* Berkeley, University of California, 1971.
9. Smyth AH: *The Writings of Benjamin Franklin.* New York, NY, MacMillan, 1906.
10. Quen J: Elisha Perkins, physician, nostrum vendor, or charlatan? *Bulletin Hist Med* XXXVII: March-April, 1963.

Spacer-Induced Atrial Fibrillation

CHRISTOPHER C. BREEDEN, MD
BENJAMIN H. SAFIRSTEIN, MD

Inhaled sympathomimetics, studied extensively for treatment of asthma, have been found to be safe from cardiac arrhythmias. We discuss a case report of albuterol used with a spacer device that induced atrial fibrillation. We review relevant literature.

An asthmatic patient today has more therapeutic options available than ever before. Various oral medications often are combined with inhaled medications. Of the inhaled agents, albuterol has gained great acceptance and enjoys a prominent position in the treatment of asthma. We recently treated a patient who developed atrial fibrillation following the use of inhaled albuterol using a spacer, a study we have not found reported in the literature.

CASE REPORT

A 26-year-old male with a four-year history of intermittent asthma noted the onset of shortness of breath one evening. He treated himself with two puffs of albuterol via a metered dose inhaler using the spacer device, InspirEase®. The cough and dyspnea improved, but he noted the onset of palpitations when he retired. Upon arising the following day, he was nauseated and mildly diaphoretic, and still had palpitations. An electrocardiogram demonstrated atrial fibrillation. He was treated with a beta-blocker, Inderal®. A short time later, his palpitations ceased; and repeat electrocardiogram showed a return to normal sinus rhythm. Other such episodes occurred following the use of albuterol with a spacer device. Medical evaluation, including thyroid profiles, Holter cardiac monitoring, echocardiography, and a cardiac stress study, was normal. Pulmonary function studies demonstrated mild variable airflow obstruction. No other oral or inhaled medications were used and he had no significant past cardiac history. He discontinued the spacer device but continued albuterol via a metered dose inhaler (MDI) without return of palpitations or arrhythmias. An exercise study with cardiac monitoring failed to document any ischemic changes or arrhythmias, either with or without inhaled albuterol.

REVIEW

Atrial fibrillation is an unstable cardiac arrhythmia that had not been reported to occur with inhaled bronchodilators. In 1967, Lands et al.[1] suggested the existence of a specific beta-2 receptor causing predominantly bronchodilation; since then many agents have emerged and provided therapeutic alternatives for bronchospastic disorders. Albuterol, a synthetic catecholamine, has been used widely since its introduction in 1968. It demonstrates a prolonged duration of action and more bronchial specificity when compared to its forerunners

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isoproterenol, isoetharine, and epinephrine. Many studies have substantiated this; no studies found any serious cardiac stimulation.

In a study of 15 steroid dependent asthmatics, Safirstein et al.[2] found no alteration in pulse, blood pressure, or rhythm following single oral doses of 4 mg and 6 mg albuterol tablets. Tattersfield et al., in a double-blind trial, found no increase in heart rate with inhaled albuterol unless given five times the recommended dose.[3] Shim et al.[4] found no increase in arrhythmia using inhaled isoproterenol except for one patient who developed atrial fibrillation while receiving concurrent intravenous aminophyllin. Montenegro et al.[5] found a higher, though not statistically significant, incidence of atrial premature beats during pulmonary function testing using inhaled isoproterenol compared to isoetharine.

Respiratory maneuvers are known to alter cardiac rhythm by slowing arteriovenous conduction and sino-atrial activity. These effects are mediated via vagal afferants in the viceral pleura, stimulated at total lung capacity and vagal efferrents innervating the heart. Lamb et al.[6] demonstrated these effects and had one case of AV dissociation with nodal tachycardia which had rapid spontaneous resolution.

It is improbable that atrial fibrillation occurred as a result of the propellant. Freon and other fluorocarbons are known to depress myocardial contractility, alter conduction, and lower the threshold of myocytes to the arrhythmogenic effects of sympathomimetic amines; it is estimated that in vivo this would take 12 to 24 consecutive breaths to see such an effect.[7]

The widespread difficulties with patient compliance in using metered dose inhalers have led to the use of an inhalation aid called spacers. Spacers act either as holding chambers for the aerosol spray or as devices which prolong the aerosol time within the spacer, thus reducing oropharyngeal deposition.

Tube spacers are simple devices which reduce the amount of medication deposited at the oropharynx from 80 to 4 percent.[13] Spacers with holding chambers, such as the one used by our patient, vary in capacity from 140 ml to 600 ml. Because these spacers allow more time for evaporation of the propellant, particle size becomes smaller and, thus, more aerosol is deposited on the smaller airways.[15] It is our contention that albuterol triggered atrial fibrillation in our otherwise healthy young asthmatic principally through the increased dose available by using the spacer. These episodes of palpitations ceased when the metered dose inhaler was used without the spacer; the patient still was able to obtain symptomatic relief. Cardiac beta receptors predominately are beta-1, but up to 20 percent have been reported to be beta-2 receptors.[9] This may account for wide variability in cardiac stimulation. With the increasing use of spacers and improved means of delivering bronchodilaters to the endobronchial system, closer observation for cardiac arrhythmias should be undertaken.

CONCLUSION

A healthy 26-year-old male with asthma developed repeated episodes of atrial fibrillations using albuterol via a metered dose inhaler with a spacer. No such episodes occurred when the spacer was discontinued. We postulate arrhythmias may result from increased deposition of the sympathomimetic drug albuterol when used with a spacer. ■

Submitted: May 1989;
Accepted: August 1989

REFERENCES

1. Lands AM, Arnold A, et al.: Differentiation of receptor systems activated by sympathomimetic amines. *Nature* 214:597-598, 1967.
2. Safirstein BH, et al.: Bronchodilator effects of oral salbutamol and theophylline combinations in chronic steroid dependent asthmatics. *J Med Soc NJ* 76:892-894, 1979.
3. Tattersfield AE, McNichol MW: Salbutamol and isoproterenol. *N Engl J Med* 218:1323-1326, 1969.
4. Shim CS, et al.: Effect of bronchodilator agents on arrhythmias. *NYS J Med* 11:1973-1976, 1976.
5. Montenegro A, et al.: Cardiac arrhythmia during routine tests of pulmonary function in patients with chronic obstruction of airways. *Chest* 73:133-139, 1978.
6. Lamb LE, Dermksian A: Significant cardiac arrhythmias induced by common respiratory maneuvers. *Am J Cardio* 11:563-571, 1978.
7. *Drug Therapeutics Bull* 14:6, 1976.
8. Newman SP, et al.: Effect of InspirEase® on the deposition of metered dose aerosols in the human respiratory tract. *Chest* 89:551-556, 1986.
9. Product information: Proventil®. Schering Corp., Kenilworth, NJ, 1987.
10. Warrell DA, et al.: Comparison of cardiorespiratory effects of isoproterenol and salbutamol in patients with bronchial asthma. *Br Med J* 1:65-70, 1970.
11. Goodman LS, Gillman A: *The Pharmacological Basis of Therapeutics.* NY, New York, Macmillian Publishing Co., 160-173.
12. Webb-Johnson DC: When drug therapy for lung disease affects the heart. *Geriatrics* 11:79-87, 1976.
13. Newman SP, Pavis D, Garland N, et al.: Effects of various inhalation modes on the deposition of radioactive pressurized aerosols. *Eur J Respir Dis* 63:57-65, 1982.
14. Silverglade A: Cardiac toxicity of aerosol propellants. *JAMA* 222:827-829, 1972.
15. Ahmad D: Effects of aerosol propellants in airway function, in Epstein A (ed): *Metered Dose Inhalors/An International Workshop.* Mississauga, Ontario, Astra Pharma Inc., 1984, pp. 22-26.

Medical Waste Regulations

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Medical waste generators are subject to federal and state waste tracking and reporting regulations. Failure to comply with regulations can result in the imposition of significant penalties.

Medical waste management and disposal have become environmental and health priorities. Legislators have responded to the public's increased attention to these issues by enacting legislation expanding existing medical waste regulatory programs. Medical waste generators, transporters, intermediate handlers, and disposal facilities now have extensive regulatory obligations and can be subject to substantial penalties for noncompliance. This article will highlight those regulatory obligations that apply to medical waste generators.

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PRIOR MEDICAL WASTE REGULATION

Until recently, the only regulation of medical waste management consisted of weak state level restrictions. The New Jersey State Department of Health (NJDOH) has restrictions for the on-site handling and treatment of pathological and infectious wastes. Traditionally, medical waste was classified into two categories: infectious (pathological) and noninfectious. Infectious waste includes such materials as liquid or solid microbiological culture media, needles, syringes, and sharps; pathology specimens, including tissues, organs, body parts, and products of conception; bulk blood; blood products, and body fluids. Noninfectious waste includes all other solid and nonrigid medical waste (including office paper products and food waste). NJDOH regulations are facility specific; that is, NJDOH has indi-

Highlights of Medical Waste Generator Regulatory Obligations

1. **Segregate:** Sharps, fluids, other medical waste.
2. **Package:** Rigid, leakproof, impervious, tear or burst resistant, sealed.
3. **Storage (if applicable):** Protect from elements, prevent access, refrigerate (if necessary).
4. **Label:** Biohazard symbol or other.
5. **Mark:** Water resistant tag including generator information/other.
6. **Tracking Form:** Complete according to state specifications and retain copies.
7. **Logs:** Daily or monthly depending on waste generation rate.
8. **Annual Report:** Summary of medical waste activity.

vidual regulations for different types of health care facilities. For example, NJDOH has separate regulations governing the on-site handling and treatment of medical waste at residential health care facilities, homes for sheltered care, ambulatory care facilities, and hospital facilities.[1] Generally, NJDOH medical waste management regulations require that the health care facility properly treat (i.e. autoclave or incinerate) infectious waste to render it noninfectious and destroy solid sharp or rigid items, or dispense of them in appropriate containers. NJDOH regulations do not extend to every possible generator of medical waste. Furthermore, NJDOH regulates medical waste only at the point of generation. NJDOH does not regulate medical waste once it has left the health care facility for disposal. Regulation of the transportation and disposal of medical waste is under the authority of the New Jersey Department of Environmental Protection (NJDEP).

Medical waste management previously was governed by the NJDEP solid waste regulatory program which established a broad framework within which all solid waste activity (i.e. collection, disposal, and utilization) is coordinated.[2] The specific requirements for solid waste activity depend upon the classification of waste, each class or type of waste being regulated differently. NJDEP devised the following waste classification scheme under the solid waste management regulations: Type 10, municipal; Type 12, dry sewage sludge; Type 13, bulky waste; Type 23, vegetative waste; Type 25, animal and food processing waste; and Type 27, dry industrial waste. Medical wastes were grouped with all other "municipal" wastes, a class defined to include waste material originating from schools, hospitals, research institutions, and public buildings.[3] Thus, NJDEP always treated medical waste (including infectious waste that had been rendered noninfectious in accordance with NJDOH standards) as common municipal waste. NJDEP never identified medical waste as an environmental concern until recently. To the contrary, NJDEP relied on NJDOH regulations as providing the necessary control over the environmental and public health concerns associated with handling and treatment of medical waste.

In addition to NJDOH and NJDEP regulations, New Jersey has a statute that specifically governs the handling of disposable or reusable hypodermic needles or syringes. The New Jersey Legislature adopted procedures for the disposal of certain needles and syringes, codified at N.J.S.A. 2A:170-25.17. The statute states as follows:

> No person shall discard or abandon in any public or private place accessible to any other person, whether or not the other person may be a trespasser, any disposable or reusable hypodermic needle or syringe, without first destroying the needle or syringe; nor shall any owner, lessee, or other person in control of premises accessible to any other person, whether or not the other person may be a trespasser, knowingly per-

> mit discarded or abandoned hypodermic needles or syringes to remain on said premises in an intact condition.
>
> For purposes of this act, a hypodermic needle or syringe shall be deemed destroyed only if: a. the needle is broken from the hub or mangled, in the case of a needle, and the nipple of the barrel is broken from the barrel or the plunger and barrel are melted, in the case of a syringe; or b. it is discarded as a single unit, without recapping, into a rigid container and the container is destroyed by grinding or crushing in a compactor, or by burning in an incinerator approved by the Department of Environmental Protection, or by any other method approved by the Department of Health.

The statute establishes methods for disposing of certain needles and syringes and failure to follow the procedures in the statute is considered a disorderly persons offense. A violation is punishable by a fine, not to exceed $500, or imprisonment (not more than five days), or both. Many of the NJDOH regulations incorporate this statute by reference.

LEGISLATIVE DEVELOPMENTS

Both Congress and the New Jersey Legislature have been actively responding to the medical waste crisis. The Medical Waste Tracking Act of 1988 was adopted by Congress and signed into law by former President Reagan.[4] This Act amends the federal Solid Waste Disposal Act and establishes a demonstration cradle-to-grave tracking program for medical waste. The states included in the demonstration project are New York, New Jersey, and Connecticut, and states bordering the Great Lakes. Under this statute, the Environmental Protection Agency (EPA) is directed to promulgate regulations to establish a tracking program for medical waste.

New Jersey has taken independent legislative initiative in this area. On March 6, 1989, Governor Kean signed the Comprehensive Regulated Medical Waste Management Act ("Comprehensive Act") into law.[5] Like the federal Act, the Comprehensive Act requires that all "regulated medical waste" be accompanied by a manifest completed by the generator, transporter, and disposal facility. However, the state Act goes beyond the scope of the federal legislation in that the state Act also requires regulated medical waste generators to register with NJDEP, maintain records of manifest activities, and perform annual reporting of manifest activities. The Comprehensive Act also severely limits disposal options; it requires all regulated medical waste be incinerated or disposed of in a manner approved by NJDEP. Regulated medical waste cannot be disposed in a sanitary landfill unless disinfected and, thereby, rendered noninfectious. Any violation is punishable by a fine of up to $50,000 per day.

Both the federal and state legislation are modeled after an existing cradle-to-grave tracking system used for hazardous waste. The hazardous waste manifest system has been operating for many years and has proved effective in controlling the illegal disposal of hazardous waste. Regardless of whether or not medical waste truly presents a public health threat, legislators believe that this proved tracking system is the most feasible means of regulating the medical community.

REGULATORY DEVELOPMENTS

In response to the public concern over medical waste, NJDEP first issued emergency regulations on August 10, 1988. It was NJDEP's opinion that the New Jersey Solid Waste Management Act (N.J.S.A. 13:1E-1 *et seq.*) provided sufficient authority for the emergency action. NJDEP implemented an interim medical waste tracking program until June 1989. Under the Comprehensive Act, NJDEP was given the specific mandate to adopt medical waste tracking regulations that mirrored the EPA demonstration program. On June 26, 1989, NJDEP issued its second emergency adoption.[6] NJDEP, concurrent with the emergency adoption, proposed that the regulations be readopted in compliance with normal rule-making procedures. NJDEP formally adopted the regulations on August 25, 1989, and the regulations will not expire until November 4, 1990. The most recent emergency regulations are a significant expansion of the prior adoption. Specifically, NJDEP has reclassified the types of medical waste regulated, increased the tracking, logging, and reporting requirements, and eliminated the small quantity generator exemption.

The regulations apply to the generation, storage, transport, transfer, treatment, destruction, disposal, or other management of "regulated medical waste" in New Jersey.[7] Regulated medical waste is categorized into the following seven classes:

- **Class 1**—Cultures and stocks of infectious agents, including among other things, specimen cultures, culture dishes and inoculation devices, waste production of biologicals, and discarded vaccines.
- **Class 2**—Pathological wastes (tissues, organs, and body parts).
- **Class 3**—Human blood and blood products.
- **Class 4**—Sharps used in animal or human patient care, e.g. needles, syringes, and broken or unbroken glassware.
- **Class 5**—Animal waste known to have been exposed to infectious agents.
- **Class 6**—Waste from special cases of humans

or animals isolated to protect others from certain highly communicable diseases.

- **Class 7**—Unused sharps.

Certain medical wastes are specially excluded or exempted from the regulations. Examples of the types of medical waste that NJDEP will not regulate include: hazardous waste, waste generated as part of home self-care, ash from incineration of regulated medical waste, human body parts intended for cremation or interment, and medical waste samples.

The regulations establish management standards for regulated medical waste generators, transporters, intermediate handlers (i.e. treatment or destruction facility), and destination facilities. Again, the management scheme of the regulations is a cradle-to-grave manifest system with each person having some degree of responsibility in the process. Generally, the requirements include logging, reporting, and manifesting. However, the standards do vary for the different persons in the management process. Further, a person may be a generator, transporter, intermediate handler, and destination facility (or any variation thereof) at any one time, and, thus, should be aware of the various regulatory obligations for each status. For example, the regulations have a registration and fee requirement for generators, transporters, intermediate handlers, and destination facilities. The fee calculation varies depending upon status. A person that qualifies for more than one status is required to register and submit individual fees. NJDEP provides a graduated fee schedule for medical waste generators. The schedule supposedly is based on the annual waste generation rate. However, generators should be aware NJDEP proposes to assess a base annual fee ranging from $528.50 to $845.78. (MSNJ and other professional groups have filed a suit contesting these charges.)

A generator's management obligations can be grouped into the following three categories: pretransport, tracking form, and recordkeeping. The medical waste pretransport requirements consist of segregation, packaging, storage, labeling, marking, and transporter certification assessment. A generator does not have to comply with the pretransport requirements if the regulated medical waste will be disposed of on-site. First, a generator must segregate waste into three groups prior to transport: sharps, fluids, and all other regulated medical waste. Second, the generator must place the waste in containers that are rigid, leak proof, impervious, tear or burst resistant, and sealed. Third, if the generator stores the packages prior to transport, then the storage location should be protected from wind, rain, and other water; locked to prevent access; protected from insects or rodents; and refrigerated to prevent decay, if necessary. Storage containers must be kept free of visible contamination and any inner liners must be handled as regulated medical waste. Fourth, a generator must label each package as medical or infectious waste or display the universal biohazard symbol, unless the package contains treated waste. Fifth, a generator must mark each package with a tag containing generator specific information.[8]

A generator must ensure that the transporter handling the regulated medical waste meets certain registration requirements. Specifically, a generator can use only those transporters that have NJDEP registration numbers, have properly notified EPA, and have a New Jersey Board of Public Utilities certification. However, generators that transport regulated medical waste for storage or disposal and meet certain quantity, transportation vehicle, and disposal restrictions, do not have to comply with registration requirements.[9]

After the waste is packaged properly and prior to transportation off-site, the generator must complete a tracking form. Like the pretransport requirements, a generator does not have to prepare a tracking form for regulated medical waste that is treated, destroyed, or disposed of on-site. Mechanical operation of the tracking system varies depending upon the mode of transportation and the class of waste transported. Typically, the generator must complete the tracking form prepared by NJDEP. However, if the regulated medical waste is transported out-of-state and the disposal state participates in the EPA demonstration program, then the generator must use the tracking form of the disposal state. Failure to complete the form properly is a violation of the regulations which can result in enforcement action and possibly, penalties.

The generator's tracking obligations do not end with completion of the form. Specifically, the generator is supposed to receive a completed tracking form back from the destination facility within 35 days of when the waste was accepted by the transporter. If the generator does not receive the completed tracking form within that time, then the generator must determine the status and location of the waste.[10] Specifically, the generator must contact the transporter, intermediate handler, or disposal facility and identify the waste location. Assuming the generator does not receive the completed tracking form within 45 days of transport, the generator must file an exception report with NJDEP and EPA.[11]

A generator also has substantial recordkeeping requirements. Typically, generators must keep copies of tracking forms and must keep daily or monthly logs, depending on waste generation rate (300 pounds per year or more—daily log; less than 300 pounds per year—monthly log).[12] The regulations have very specific technical requirements on the contents of the logs. In addition, any generator that treats and destroys medical waste on-site must maintain a record of those activities according to NJDEP specifications. Finally, generators must submit an annual report of regulated medical waste activity. NJDEP has the necessary forms.

Some generators operate on-site incinerators for treatment and destruction of their medical waste. Generators should be aware that on-site incinerators expand their regulatory obligations with NJDEP. A generator that incinerates its waste only must keep a log of the incineration activity according to NJDEP standards.[13] If a generator also incinerates regulated medical waste from off-site sources, then the regulatory obligations are expanded significantly. First, the generator must maintan an expanded form of incineration log. Second, the generator becomes regulated as a destination facility. With this status, the generator has additional tracking form obligations and recordkeeping requirements.[14] Further, the generator has an obligation to check the waste load, compare it with the data presented in the tracking form, and note any discrepancies. If the generator notes discrepancies, then he must report according to NJDEP standards.[15]

Any generator that operates an on-site medical waste incinerator must have temporary NJDEP authorization or comply with the engineering registration requirements applicable to all solid waste incinerators. To obtain a temporary authorization, the generator must first establish that the incinerator was used to dispose of medical waste on or before March 6, 1989, and that the incinerator continues in operation. Also, the generator must have a valid air pollution permit and pay the required registration fees. The regulations also require compliance with operational standards for medical waste incinerators before NJDEP will issue temporary authorization.[16]

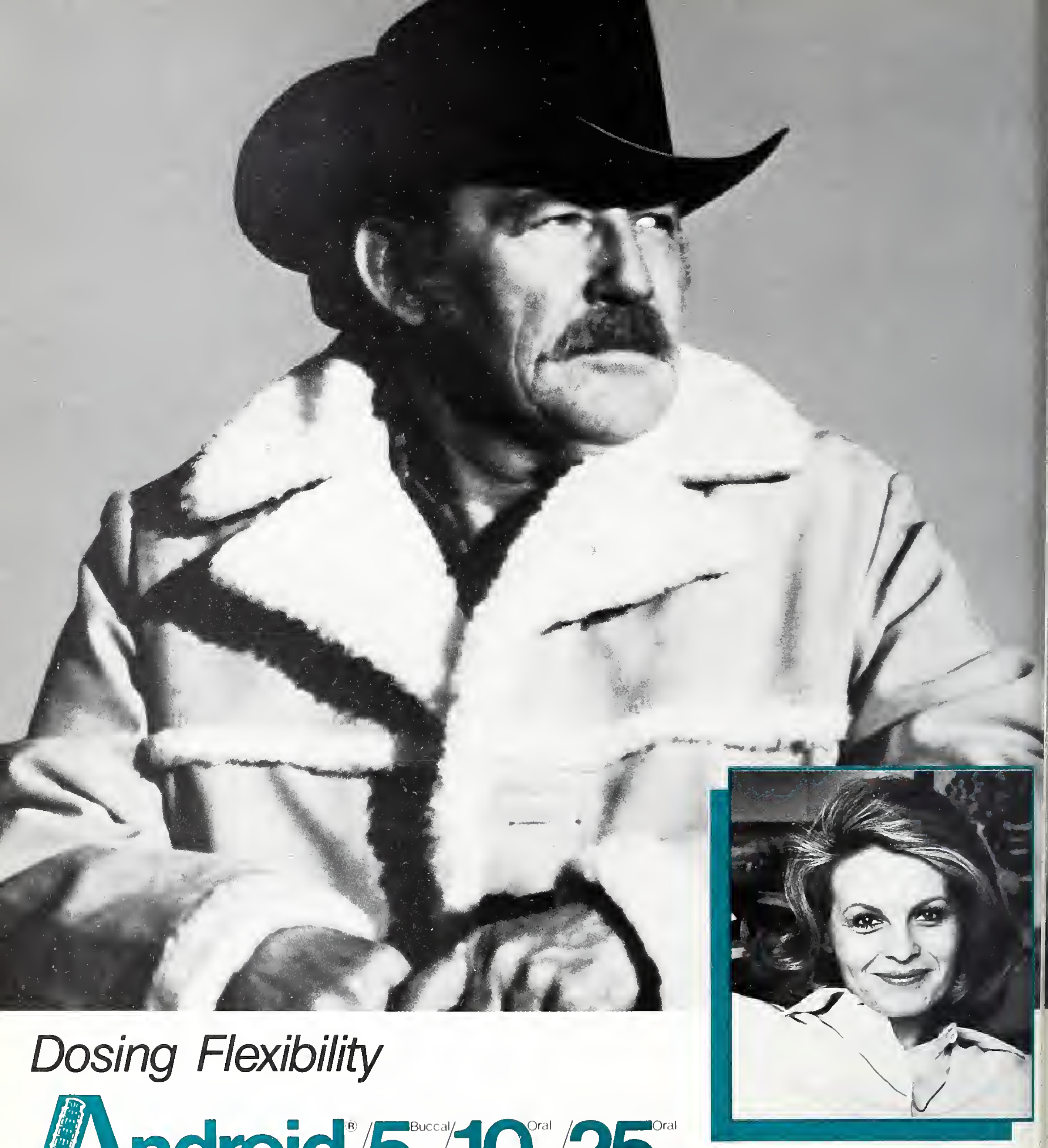
CONCLUSION

The scope and effect of NJDEP's medical waste regulations are extraordinary. The typical physician, dental, and veterinarian offices are subject to a full panoply of environmental standards that require diligence and effort to coordinate. NJDEP provides few exceptions to the regulatory application and eliminates the possibility of avoiding regulatory compliance based on small quantity generator status. Further, NJDEP would impose annual generator fees starting at a base range of \$528.50 to \$845.78. The regulations create substantial operational burdens, economic concerns, and potential penalties for a group never before subject to environmental standards. Medical practitioners now must become fully cognizant of the final version of the regulations and integrate a medical waste management system into their current operations. ■

Submitted: August 1989;
Accepted: September 1989

REFERENCES

1. New Jersey Administrative Code references for regulation of health care facilities and their associated medical waste management provision: residential alcoholism treatment facilities (N.J.A.C. 8:31C-1.1 *et seq.*, no medical waste provision), long-term care facilities (N.J.A.C. 8:39-1.1. *et seq.*; specific medical waste provision, N.J.A.C. 8:39-19.3), drug treatment facilities (N.J.A.C. 8:42B-1.1 *et seq.*; specific medical waste provision, N.J.A.C. 8:42B-19.2), ambulatory care facilities (N.J.A.C. 8:43A-1.1 *et seq.*; specific medical waste provision, N.J.A.C. 8:43A-14.5), hospital facilities (N.J.A.C. 8:43B-1.1 *et seq.*; specific medical waste provision, N.J.A.C. 8:43B-3.6).
2. N.J.A.C. 7:26-1.1 *et seq.*
3. N.J.A.C. 7:26-2.13(g).
4. Public Law 100-582 (which amends 42 U.S.C. §6901 *et seq.*).
5. Public Law 1989, Chapter 34, N.J.S.A. 13:1E.48.1 *et seq.*
6. 21 N.J.R. 2109, N.J.A.C. 7:26-3A-1.1 *et seq.*
7. The definition of regulated medical waste appears at 7:26-3A.6 and states: "A regulated medical waste is any solid waste, generated in the diagnosis, treatment (for example, provision of medical services), or immunization for human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that is [listed in the regulations]."
8. Package marking requirements appear at N.J.A.C. 7:26-3A.15. Generally, a generator must mark each package with a water-resistant tag. This tag must include the following information: 1. The generator's or intermediate handler's name and address. 2. The transporter's name, NJDEP solid waste registration number, and date of shipment. 3. Identification of contents as medical waste. The requirement includes marking inner containers (i.e. within the packaging) with indelible ink highlighting items 1 and 2 above.
9. N.J.A.C. 7:26-3A.16(d).
10. N.J.A.C. 7:26-3A.22.
11. An exception report must be postmarked within 46 days of shipment of the medical waste off-site and include the original tracking form, and a letter demonstrating waste location investigative efforts. See N.J.A.C. 7:26-3A.22(b)
12. N.J.A.C. 7:26-3A.21.
13. See N.J.A.C. 7:26-3A.25. The incineration log must include (1) incineration start date, (2) incineration cycle time (3) total waste quantity incinerated (with specific estimate of medical waste composition), and (4) quantity of ash generated.
14. A destination facility will receive a tracking form from the transporter. The destination facility must sign the tracking form, note discrepancies, give the transporter a copy and send a copy to the generator. See N.J.A.C. 7:26-3A.39. The destination facility must keep a record of all tracking forms (N.J.A.C. 7:26-3A.41) and submit annual reports to NJDEP (N.J.A.C. 7:26-3A.42).
15. N.J.A.C. 7:26-3A.40.
16. N.J.A.C. 7:26-3A.37.



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Cutaneous Malignant Melanoma

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From January 1973 to December 1985, 136 patients with primary cutaneous malignant melanoma were treated at Englewood Hospital. Pathologic types, methods of treatment, and results are discussed and a comparison of results is made with other institutions.

Cutaneous malignant melanoma, once considered to be a rare malignancy with an unpredictable biological behavior, now is known to have the highest rate of increased incidence of all cancers, except for bronchogenic carcinoma.[1] The biological behavior of these tumors also is better understood by analysis of the various histologic parameters identified to correlate closely with survival. These parameters include Clark's level of invasion[2] and Breslow's tumor thickness.[3] Although malignant melanoma is one of the skin cancers frequently encountered in a community hospital, most of the reports on melanoma have been from university centers. We present the experience in a community hospital for comparison of results.

PATIENTS AND METHODS

The records of 136 consecutive patients with cutaneous malignant melanoma (MM) treated at Englewood Hospital between January 1, 1973, and December 31, 1985, were reviewed. Englewood Hospital is a 547-bed voluntary hospital located in northern New Jersey. All patients, whether diagnosed at Englewood Hospital or elsewhere, received their treatment at Englewood Hospital.

During the study period, MM comprised 2 percent of all cancers and 53 percent of all skin cancers seen at this institution. Of these patients, 135 patients (99 percent) were white and 1 patient (1 percent) was black, with a sex distribution of 62 men (46 percent) and 74 women (54 percent). Ages ranged from 21 to 91 years of age with a mean of 58.5 years; maximum incidence was noted in the 50-to-59-year-old age group. Also, 131 patients (96 percent) had clinical stage I, 4 patients (3 percent) had stage II, and 1 patient (1 percent) had stage III melanoma on presentation. Also, 3 patients (2 percent), including 1 patient with dysplastic nevus syndrome, had a family history of MM.

The sites of distribution were trunk (38 percent), lower extremities (29 percent), head and neck (19 percent), and upper extremities (14 percent) (Table

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1). Also, 2 patients (1.5 percent) had multiple primaries and 5 patients (4 percent) had satellite lesions. Morphological types were superficial spreading (SS) (42 percent); nodular (N) (15 percent); lentigo malignant (LM) (15 percent); acral lentiginous (AL) (3 percent); and unclassified (25 percent). Microstaging by Clark's level of invasion revealed level I to be 5 percent; level II to be 22 percent; level III to be 29 percent; level IV to be 23 percent; level V to be 7 percent; and unknown to be 14 percent. Staging by Breslow's tumor thickness revealed 139 thin (< 0.76 mm) melanomas (29 percent); 18 intermediate (0.76 to 1.49 mm) melanomas (13 percent); 45 thick (> 1.5 mm) melanomas (33 percent); and 34 melanomas of unknown thickness (25 percent) (Table 2). Ulceration was present in 24 patients (18 percent), absent in 72 patients (53 percent), and unknown in 40 patients (29 percent).

Treatment for clinical stage I MM consisted of wide local excision with a 3 to 5 cm margin. Head and neck lesions had lesser margins because of cosmetic considerations. Elective lymph node dissection (ELND) was performed in some patients with high-risk lesions with levels III, IV, and V that were equal to or greater than 0.76 mm in thickness. All patients with clinical stage II MM underwent wide local excision plus regional lymph node dissection. Also, 12 patients underwent axillary dissections; 10 patients underwent superficial groin dissections; 1 patient underwent deep groin dissection; 3 patients underwent modified neck dissections; and 2 patients underwent radical neck dissections. Skin defects following wide excisions were closed primarily or with skin grafts. Minor amputations were performed for MM on the digits. Followup data by the tumor registry were completed to December 1986. The mean duration of followup was 4.7 years, with 9 patients lost to followup. Survival rates were calculated by life-table analysis. Disease-free survival was calculated from date of definitive surgery to date of first documented local recurrence or metastatic disease. Statistical significance was calculated by the chi-square (X^2) test.

RESULTS

Of our study group, 108 patients (79 percent) underwent wide local excision (WLE); 9 patients (7 percent) underwent WLE plus ELND; and 19 patients (14 percent) underwent WLE plus deferred lymph node dissection.

Following initial WLE, local recurrence developed in 14 patients (10 percent) at a median time of 48 months. Subsequent metastases occurred in 19 patients (46 percent) with level IV to level V, compared to 3 patients (4 percent) with level I to III ($P < 0.001$). In addition, 19 patients (45 percent) with thick melanomas equal to or greater than 1.5 mm (mean +/- SD, 4.04 +/- 3.53, median 2.87 mm) developed metastases, compared to no metastases in patients with thin or intermediate melanomas, less than 1.5 mm thick (mean +/- SD, 0.61 +/- 0.36, median 0.5 mm) ($P < 0.001$).

Of 9 patients in clinical stage I who underwent ELND, 1 patient (11 percent) had occult metastases, while 17 of 19 patients (90 percent) with clinically positive lymph nodes undergoing delayed lymph node dissection (DLND) had pathologically positive nodes. Nine of 13 patients (69 percent) with lesions equal to or greater than 4 mm thick later developed distant metastases, compared to 8 of 29 patients (28 percent) with lesions between 1.5 to 3.99 mm in thickness. In patients developing distant visceral metastases, the most common sites of involvement were lung (46 percent), liver (32 percent), brain (23 percent), and multiple sites (27 percent). Overall five-year survival for clinical stage I patients was 86 percent, and five-year disease-free survival was 63 percent. Men had a poorer five-year survival rate of

Table 1. ***Site and growth pattern.***

Site	**Male**	**%**	**Female**	**%**	**Total**	**%**
Head and neck		24		15		19
Upper extremity	13			15		14
Lower extremity	16			39		29
Trunk	47		31		38	
Type						
Superficial spreading	43		41		42	
Nodular	21		11			15
Lentigo malignant	15			16		15
Acral lentiginous	0			5		3
Unclassified	21		27		25	

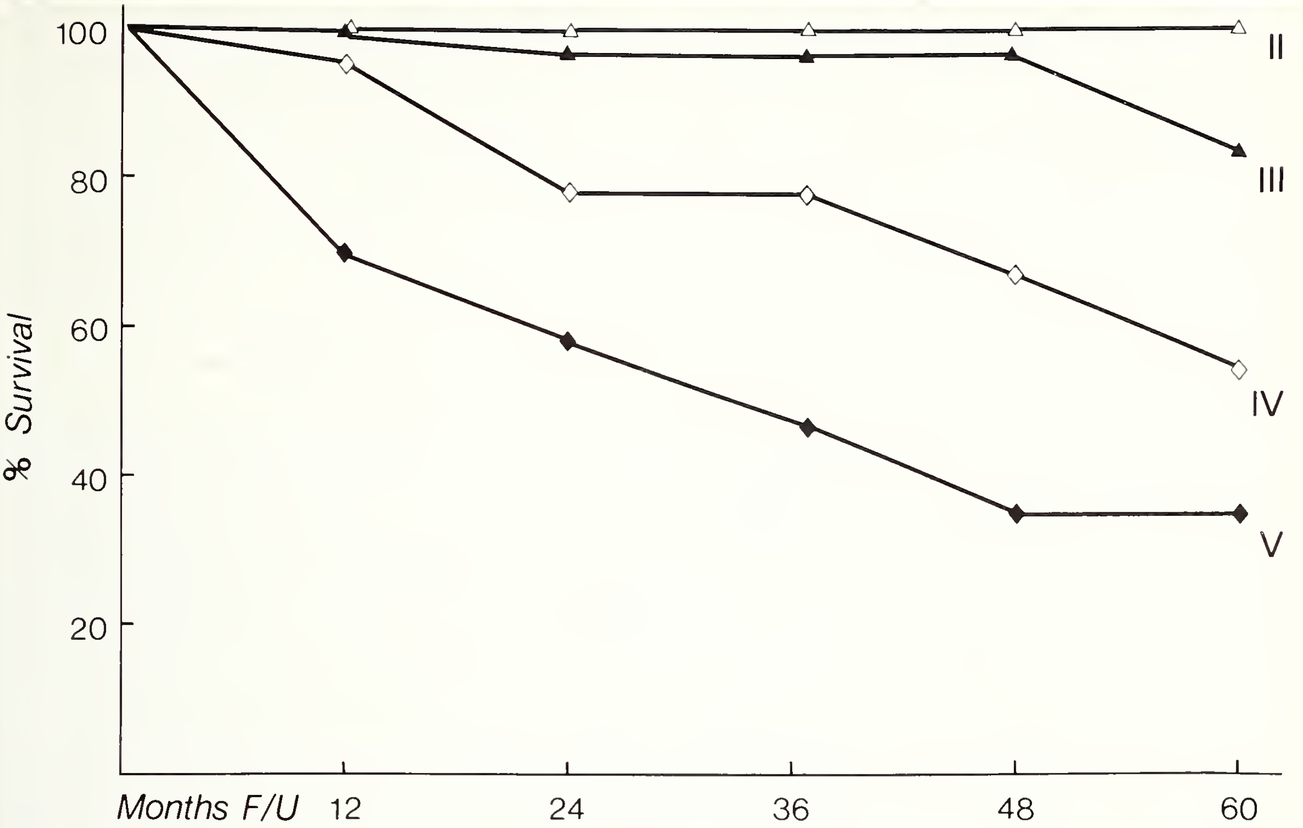

Figure 1. Graph showing survival for stage I melanoma according to level of invasion.

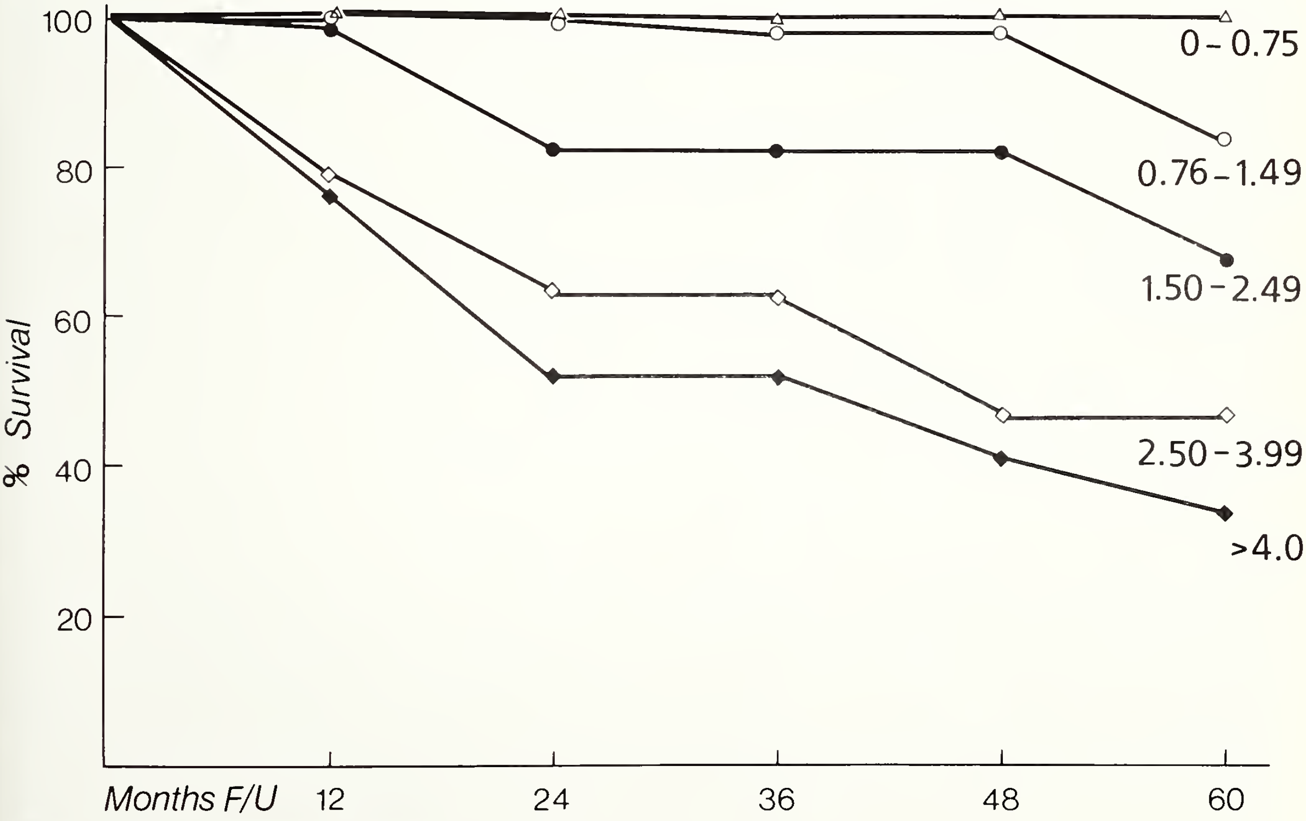

Figure 2. Graph showing survival for stage I melanoma according to tumor thickness.

71 percent as compared to women with a survival rate of 83 percent. None of the patients with stage II and stage III MM survived five years. The average length of survival for the 4 patients with stage II disease was 12.5 months and for the 1 patient with stage III disease the length of survival was 1.5 months.

DISCUSSION

Malignant melanoma represented the most common cutaneous malignancy at our institution. Although there are major melanoma treatment centers across the nation (with established treatment protocols), the surgeon in a community hospital frequently is faced with managing this disease. Due to ongoing controversies in the literature regarding management of regional lymph nodes, there often is a dilemma in deciding when to perform regional lymphadenectomy. This is reflected by the lack of uniform criteria in selecting ELND versus DLND among the surgeons at Englewood Hospital. Despite these differences, a review of our patients with MM shows comparable results with series from larger centers in terms of prognostic variables and survival.

Hereditary MM was noted in only three patients

Table 2. *Correlation of level (Clark) and tumor thickness (Breslow) with local recurrence, metastases, and survival.*

Level	No.	(%)	% Local Recurrence	% Metastases	5 Yr. Survival
I	7	(5)	—	—	—
II	30	(22)	3	—	100
III	39	(29)	8	8	85
IV	31	(23)	19	39	53
V	10	(7)	10	70	35
Unknown	19	(14)	11	47	—
Thickness					
0.0-0.75	38	(29)	3	—	100
0.76-1.49	17	(13)	12	—	83
1.50-2.49	20	(16)	20	—	67
2.50-3.99	9	(7)	11	67	48
4.0	13	(10)	15	69	34
Unknown	32	(25)	16	38	—

Table 3. *Five-year survival.*

Level	Wanebo et al.[4]	Eldh et al.[5]	Present Report
I			
II	100	100	100
III	88	87	85
IV	65	72	53
V	16	35	35

Thickness	Balch et al.[6]	Present Report
0-0.75	89	100
0.76-1.49	75	83
1.50-2.49	58	67
2.50-3.99	46	48
≥ 4.00	35	34

(2.2 percent), including one patient with a dysplastic nevus. None of the patients with hereditary melanoma had multiple primaries, and these patients had better survival than patients with sporadic MM. Two patients with sporadic melanoma, representing 1.5 percent of the total, had multiple primaries. Men had a poorer prognosis, possibly from having a predominance of truncal lesions (47 percent) and higher proportions of nodular growth pattern (21 percent), compared to women with a higher proportion of lower extremity lesions (39 percent), and lower proportion of nodular growth pattern (11 percent).

Patient survival and the risk of regional lymph node and distant metastases correlated very closely with Clark's level of invasion and Breslow's tumor thickness by an inverse proportion (Figures 1 and 2). Our five-year survival of patients with level II (100 percent), level III (85 percent), level IV (53 percent), and level V (35 percent) is similar to those reported in the series of Wanebo et al.[4] and Eldh et al.[5] (Table 3).

Surgical extirpation of melanoma by wide local excision, first proposed and performed by Pemberton in 1858,[7] remains the standard treatment for clinical stage I MM. Present controversy surrounds the benefits of ELND versus DLND. The reported proportion of clinically negative, microscopically positive regional lymph nodes range from 5 to 50 percent.[8,9] Because patients with level II or less than or equal to 0.76 mm MM have a very low risk of regional node metastases, there is a consensus that they do not require ELND. Most surgeons, however, would consider ELND in patients with level IV to V and 1.5 to 3.99 mm lesions, because of the higher risk of regional mode metastases, but relatively low risk for distant metastases.[10-12] The recommended upper limit of 4 mm thickness for performing ELND also is controversial. The proponents of the 4 mm upper limit claim that the high risk for distant microscopic metastatic disease in patients with lesions equal to or greater than 4 mm, offsets the benefits of ELND.[6] Our experience supports this view. Distant metastases occurred later in 9 of 13 patients (69 percent) with lesions equal to or greater than 4 mm compared to 8 of 29 patients (28 percent) with 1.5 to 3.99 mm lesions.

Overall, 28 patients (21 percent) in our series underwent regional lymph node dissection. Nine patients (7 percent) had ELND, and 19 patients (14 percent) had DLND with five-year survivals of 67 percent and 53 percent, respectively. Because of the small number of patients, no reliable statistical conclusion can be drawn from this data. The controversy regarding the timing of regional lymphadenectomy continues,[13] reports of two trials of ELND by Sim et al.[14] and Veronesi et al.[15] indicate that survival rates are similar in patients with pathologically positive nodes, whether these are removed during ELND or later, when clinically positive, by DLND.

dismal, with limited palliation obtained from chemotherapy, radiotherapy, immunotherapy, and hormonal therapy. In this series from Englewood Hospital, mean survival for stages II and III was 12.5 and 1.5 months, respectively. ■

Submitted: June 1989; Accepted: July 1989

REFERENCES

1. Kopf AW, Rigel DS, Friedman RJ: The rising incidence and mortality rate of malignant melanoma. *J Dermatol Surg Oncol* 8:760-761, 1982.
2. Clark WH, Jr, From L, Bernadino EA, Mihm MC: The histogenesis and biological behaviour of primary human malignant melanomas of the skin. *Cancer Res* 29:705, 1969.
3. Breslow A: Prognosis of cutaneous melanoma. *Ann Surg* 172:902-908, 1970.
4. Wanebo HT, Woodruff A: Malignant melanoma of the extremities: A clinicopathologic study using levels of invasion (microstage). *Cancer* 35:666-676, 1975.
5. Eldh, TB, Peterson LE: Prognostic factors in cutaneous malignant melanoma in stage I: A clinical morphological and multivariate analysis. *Scand T Plast Reconst Surg* 12:243-255, 1978.
6. Balch CM, Soong ST, Milton GW, et al.: A comparison of prognostic factors and surgical results in 1,786 patients with localized (stage I) melanoma treated in Alabama, USA, and New South Wales, Australia. *Ann Surg* 196:677-683, 1982.
7. Urteaga OB, Pack GT: On the antiquity of melanoma. *Cancer* 19:607-610, 1966.
8. Sim FH, Taylor WF, Ivias JC, et al.: A prospective randomized study of the efficacy of routine elective lymphadenectomy in management of malignant melanoma. *Cancer* 41:948-956, 1978.
9. Roses DF, Harris MN, Hidalgo D, et al.: Primary melanoma thickness correlated with regional lymph node metastases. *Arch Surg* 117:921-923, 1982.
10. Clark WH: A classification of malignant melanoma in man correlated with histogenesis and biological behaviour, in Montagna BW, HuF (eds), *Advances in Biology of Skin*. New York, NY, Pergamon Press, 1967.
11. Hansen MG, McCarter AB: Tumor thickness and lymphocytic infiltration in malignant melanoma of the head and neck. *Am J Surg* 128:557-561, 1974.
12. Wanebo HJ, Fortner JG, Woodruff T, et al.: Selection of the optimal surgical treatment of stage I melanoma by depth of microinvasion: Use of combined microstage technique (Clark-Breslow). *Ann Surg* 182:302-313, 1975.
13. Symposium: Controversies in the treatment of malignant melanoma. *Contemp Surg* 32:99-121, 1988.
14. Sim FH, Taylor WF, Pritchard I, et al.: Lymphadenectomy in the management of stage I malignant melanoma: A prospective randomized study. *Mayo Clinic Proc* 61:697-705, 1986.
15. Veronesi U, Adamus T, Bandiera DC, et al.: Delayed regional lymph node dissection in stage I melanoma of the extremities. *Cancer* 49:2420-2430, 1982.

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Pasteurella Multocida Meningitis

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SHRIKRISHNA MATE, MD
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The diagnosis of Pasteurella multocida *meningitis was confused by a false-positive latex particle agglutination test implicating group B streptococcus. This illness and false-positive reactions in antigen detection are discussed.*

Pasteurella multocida, a small gram-negative coccobacillus that commonly colonizes the respiratory tract of birds and mammals (particularly cats and dogs), has long been known to cause infection in man following a bite or scratch.[1-3]

Although rare, severe infection without prior trauma does occur. Both sepsis and meningitis have been documented in infants who have had nontraumatic mucous membrane contact with a pet dog or cat.[1,2,6,7]

We present a case in which an infant developed *P. multocida* meningitis through mucous membrane contact with the family's dog. This case is of particular interest because the dog was encouraged to lick the infant's face and mouth in the interest of bonding, and because the initial etiologic diagnosis was confounded by a false-positive latex particle agglutination (LPA) test suggesting group B streptococcal infection.

CASE REPORT

An eight-week-old white infant male, treated for otitis media at four weeks of age, appeared irritable. His pediatrician found no abnormality nor focus of infection. The patient developed a temperature of 39.9°C, and was admitted to the hospital.

The infant was born at term by spontaneous vaginal delivery. Apgar scores were 9 at one and five minutes. The baby had been adopted at 48 hours of age, and no other history was available.

On admission, the physical examination revealed an infant whose skin was hot, dry, and flushed. His fontanel was soft but slightly bulging. The temperature was 39.1°C, and the apical pulse was 156/min. He weighed 5.8 kg. The examination was otherwise unremarkable. The white blood count was 11,100/mm^3 with 86 percent polymorphonuclear leukocytes, 37 percent lymphocytes, and 8 percent band forms. A cerebrospinal fluid (CSF) examination revealed 1,566 WBC/mm^3 of which 99 percent were polymorphonuclear cells. The CSF glucose was 49 mg/dl and the protein was 103 mg/dl. No organisms were seen on a gram-stained smear of the CSF but the latex particle agglutination (LPA) test was positive for group B streptococcal antigen. Blood, throat, and urine cultures were obtained. Intravenous ampicillin (Omnipen-N®) 300 mg/kg/day, gentamicin (Garamycin®) 7.5 mg/kg/day, and ceftriaxone (Rocephin®) 100 mg/kg/day were initiated. The infant was trans-

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ferred to the pediatric intensive care unit (PICU) at Jersey Shore Medical Center for further care.

On arrival in the PICU, the patient was extremely irritable but alert. The physical examination was otherwise normal. The vital signs were: temperature 32.8°C, pulse 140/min, respirations 39/min, and a blood pressure of 96/58 mm Hg. He weighed 5.8 kg. The complete blood count was: hemoglobin 8.8 g/dl, hematocrit 26.7 percent, WBC 11,600 per mm^3 with 14 percent polymorphonuclear cells, 16 percent bands, 60 percent lymphocytes, and 10 percent monocytes. The platelet count, urinalysis, serum electrolytes, urea nitrogen, and creatinine were normal. A chest roentgenogram showed mild pulmonary hyperaeration. Blood, urine, throat, and rectal cultures were repeated. Antigen detection on a boiled sample of the original CSF was repeated by LPA and again was positive for group B streptococcus. No agglutination was observed using reagents for *Neisseria meningitidis, Haemophilus influenzae, Streptococcus pneumoniae,* or control reagents.

All cultures remained negative for 48 hours. On the third day, the referring hospital isolated *P. multocida* from the CSF on sheep blood and chocolate agar which then was confirmed.

Blood, urine, and throat cultures done at both hospitals remained negative.

In light of the identification of *P. multocida,* further history was elicited from the parents which revealed a pet dog was being bonded to the baby by encouraging it to lick the baby's face and mouth. A culture obtained by a veterinarian from the dog's oropharynx grew *P. multocida.*

The infant remained febrile to 39.4°C until after the third day of antibiotic therapy. On hospital day five, gentamicin was discontinued and ampicillin 300 mg/kg/day was continued to complete ten days of therapy. A lumbar puncture done 24 hours after the cessation of antibiotic therapy revealed sterile cerebrospinal fluid with 5 WBC/mm^3 (one polymorphonuclear cell, four lymphocytes), 520 RBC/mm^3, protein 54 mg/dl, and glucose 34 mg/dl. LPA was negative with all reagents. The infant's recovery was uneventful and he was returned to the care of his private pediatrician.

DISCUSSION

The frequent contact of the dog's saliva with the infant's oral mucosa in addition to the isolation of *Pasteurella multocida* from both the dog's saliva and the child's spinal fluid make it likely that the transmission of the organism through the mucous membranes occurred. This has been described in the literature.[1,2,8]

A confusing aspect in this case was that on two different occasions, in two different laboratories, the LPA was positive for group B streptococcus. All antigen detection methods have the potential for false-positive reactions.[9-12] With LPA, these reactions may reflect nonspecific agglutination or true cross-reactivity between antigen components of different bacteria. Nonspecific agglutination is suggested where there is agglutination of control latex beads.[12] Such reactions may be due to heat labile factors and can be minimized by boiling specimens prior to testing.[9] Nonspecific false-positive reactions due to circulating IgM antibodies can be counteracted by the addition of dithiothreitol to the specimen.[11] Since nonspecific agglutinins generally are present in low titers, dilution of serum also will reduce confusion in most cases.[9]

Specific false-positive reactions have been described with all antigen detection techniques but are very unusual.[10] Cross-reactions between different subtypes within a species and, to a lesser extent, between different species within a genus usually will not pose a clinical risk. Intergeneric cross-reaction, such as we observed in this case, could have very significant consequences and fortunately are rare. Using countercurrent immunoelectrophoresis, antisera against *Haemophilus influenzae* antigen have been shown to cross-react with strains of *Escherichia coli, Streptococcus pneumoniae,* and *Staphylococcus aureus.* Antisera against *S. pneumoniae* have been shown to cross-react with strains of *Neisseria meningitidis* and alphastreptococci; and the antisera against *N. meningitidis* have been shown to cross-react with strains of *E. coli* and *H. parainfluenzae.*[10]

False-positives also have been uncommon with LPA, where reagents for *H. influenzae* have reacted in patients with meningococcemia and *E. coli* bacteremia.[10,13] LPA to detect group B streptococcal antigen has cross-reacted with group G streptococcal antigen and *S. aureus,* but has not been reported to cross-react with *Haemophilus sp., Neisseria sp.,* or other gram-negative organisms.[14] The basis for the cross-reaction in our patient is unclear but a nonspecific reaction seems unlikely since no agglutination was observed with control latex beads.[12]

The etiologic diagnosis of meningitis is made by the isolation of the offending organism from CSF.[3] In this case, *Pasteurella multocida* typically grew on sheep blood and chocolate agar but not on MacConkey's media.[1,2,8] Morphologically, *Pasteurella multocida* is similar to other central nervous system pathogens such as *Haemophilus influenzae* and *Neisseria meningitidis,* but modern laboratory techniques facilitate its identification.[1,2]

Penicillin and ampicillin consistently have been effective against *Pasteurella multocida* both in vitro and in vivo. Because these agents penetrate the central nervous system, they remain the drugs of choice for all infections caused by *P. multocida* including meningitis. In addition, this organism is susceptible to numerous other antibiotics including the extended spectrum penicillins, cephalosporins, tetracyclines, fluoroquinilones, and chloramphenicol (Chloromycetin®). However, while *Pasteurella multocida* is exquisitely sensitive to the newer cephalosporins such as cefuroxime (Ceftin®), cefotaxime (Claforan®), ceftizoxime (Cefizox®), and ceftriaxone, the activity of older drugs in this class such as cephalexin (Keflex®) and cefadroxil (Duricef®) may be unreliable, especially in concentrations achievable with oral administration. Similarly, some strains of *P. multocida* are resistant to the antistaphylococcal penicillins, nafcillin (Unipen®), and dicloxacillin (Dynapen®), and most or all strains are resistant to clindamycin (Cleocin®) and vancomycin (Vancocin®).[3-5]

In this case, ampicillin and gentamicin were initiated prior to the isolation of the organism as the usual empiric regimen for meningitis in this age group. When the organism and its sensitivity to ampicillin were confirmed, that antibiotic was used exclusively. Several reported cases were treated similarly with good results.[1,2,7,8]

Several deaths have been reported after systemic infection with *Pasteurella multocida.* In infants who have been treated with appropriate antibiotic therapy, the outcome generally has been good and only a few have had neurological sequelae.[1,8] The infant in this case did not exhibit any immediate neurological problem and one year after discharge from the hospital, both his physical and neurological examinations were normal and he had achieved all the expected developmental milestones for his age.

It is common for families to have close contact with and affection for household pets, particularly cats and dogs. When there is a newborn, part of the adaptation period may include attempting to bond the infant to the animal. This may include permitting the animal to lick or nuzzle the child.

At least one-half of the documented cases of *Pasteurella multocida* meningitis and sepsis have occurred in infants under one year of age. Like our patient, many of these children did not sustain any injury from the animal.[1,6,7,8]

Since infants seem to be at increased risk of mucosal invasion by this organism, the physician should attempt to prevent this infection by obtaining a history related to household pets at the time of instruction in newborn care. The parents should be advised about thorough handwashing between handling of the pet and the child, and they should be cautioned of the risk to the child by direct contact with the pet. (Other zoonotic infections may be avoided in this way as well.)

Attempts at bonding should be delayed until the child is crawling and can recognize the animal as "something." At this time, the child may pet or stroke the animal if the animal is amenable to such attention. The parent should assess the temperament of the animal. Some do not favor children and, thus, cannot be bonded. An adult must be present and close to the animal and child at all times. ■

Submitted: August 1989;
Accepted: September 1989

REFERENCES

1. Clapp DW, Kleinman MB, et al.: *Pasteurella multocida* meningitis in infancy. An avoidable infection. *Am J Dis Child* 140:444-446, 1986.

2. Thompson CM, Pappu L, Leukoff AN, et al.: Neonatal septicemia and meningitis due to *Pasteurella multocida. Pediatr Infect Dis* 3:595-561, 1984.

3. Stechenberg BW, et al.: *Pasteurella multocida* infection, in Feigin RD, Cherry JD (eds): *Textbook of Pediatric Infectious Disease. 2nd Edition.* Philadelphia, PA, WB Saunders, 1987, pp 1224-1227.

4. Shikuma CC, Overturf GD: Antibiotic susceptibility of *Pasteurella multocida. Eur J Clin Microbiol* 4:518-519, 1988.

5. Goldstein EJC: Comparative activities of cefuroxime, amoxicillin-clavulanic acid, ciprofloxacin, enoxacin, and ofloxacin against aerobic and anaerobic bacteria isolated from bite wounds. *Antimicrob Agents Chemother* 32:1143-1148, 1988.

6. Repice JP, Neter E: *Pasteurella multocida* meningitis in an infant with recovery. *J Pediatr* 86:91-93, 1975.

7. Frutos AA, Levinsky D, Scott EG, et al.: A case of septicemia and meningitis in an infant due to *Pasteurella multocida. J Pediatr* 92:853, 1978.

8. Weber DJ, Wolfson JS, Swartz MN, et al.: *Pasteurella multocida* infections: Report of 34 cases and review of the literature. *Medicine* 63:133-154, 1983.

9. Wilson CB, Smith AL: Rapid tests for the diagnosis of bacterial meningitis, in Remington JS, Swartz MN (eds): *Current Clinical Topics in Infectious Diseases.* New York, NY, McGraw-Hill, 1986, pp 134-156.

10. Kaplan SL: Antigen detection in cerebrospinal fluid—pros and cons, in Balows A, Tilton RC (eds): *Body Fluids and Infectious Diseases. Am J Med,* 1983.

11. Bromberger PI, Chandler B, Green H, Haddow JE: Rapid detection of neonatal group B streptococcal infections by latex agglutinations. *J Pediatr* 96:104-106, 1980.

12. Baker CJ, Rench MA: Commercial latex agglutination for detection of group B streptococcal antigen in body fluids. *J Pediatr* 102:393-395, 1983.

13. Daum RS, Siber GR, Kamon JS, Russell RR: Evaluation of a commercial latex particle agglutination test for rapid diagnosis of *Haemophilus influenzae* type B infection. *Pediatrics* 69:446-471, 1982.

14. Friedman CA, Wender DF, Rawson JE: Rapid diagnosis of group B streptococcal infection utilizing a commercially available latex agglutination assay. *Pediatrics* 73:27-30, 1984.

15. Stevens DL, Higbee JW, Oberhofer TR, Everett ED: Antibiotic susceptibilities of human isolates of *Pasteurella multocida. Antimicrob Agents Chemother* 16:322-324, 1970.

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NOTEBOOK

TRUSTEES' REPORT

A regular meeting of the Board of Trustees was held on December 17, 1989, at the Executive Offices. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Report of the President . . .
(1) Update . . . Noted Dr. Hirsch's comments on special dates for meetings and on the Medical Books for China International Foundation Project.
(2) JEMPAC . . . Stated the final report of the Nominating Committee is expected to be ready for the January 1990 meeting; Dr. Hirsch reiterated his hope that all Board members will join JEMPAC; and Dr. Ryan stated he will continue his efforts for JEMPAC as an ex-officio member.
(3) Executive Committee Meeting . . . Reviewed the following: Dr. Mineur noted approval of a $50,000 dividend from the Medical Underwriters to MSNJ and that MIIENJ will continue its policy of providing grants to MSNJ for certain activities.
(4) Task Force on AIDS . . . Noted that a letter was sent to James Florio requesting the establishment of an interagency task force to include strong representation from MSNJ.

AMA Interim Meeting . . . Described the following items: a dinner honoring Drs. William J. D'Elia and Myles C. Morrison, Jr, retiring as members of the AMA Delegation; and Dr. Palma Formica's candidacy for the AMA Board of Trustees.

AMA Interim Meeting Reports: Noted the following actions by the Board of Trustees concerning the following: Report QQ (Strengthening the AMA: Fiscal Responsibility and Oversight)—an independent investigation will be conducted, no financial arrangements are to be made with any employees by the executive vice-president, Dr. Sammons will retire on March 31, 1991, and the Board will formulate and institute specifically defined limits upon the authority of the executive vice-president in respect to monetary, compensation, and health policy matters to conform to the exercise of the Board's fiduciary responsibilities; Report CC (Maternal/Fetal Conflict)—determined to be outdated and will be discussed at the June meeting; Report Z (Constitutional Challenges to MAACs as an Interference with the Right To Contract)—MAAC will be approached legislatively; and Resolution 42 (Public Education about Medical Costs)—adopted the following:

> Resolved, that the AMA carry out a factually based public education campaign clearly delineating the elements of medical care expenditures and explaining the factors leading to unwarranted, unavoidable, or unproductive expenses which are not subject to physician control: unhealthy lifestyles, an aging population, high health insurance administrative costs, inappropriate applications of technology, and support of unneeded hospital beds.

Report of Executive Director . . .
(1) MSNJ Paid Membership . . . Noted that as of November 1989, total paid membership was 7,416; the difference between the 1988 and 1989 figures are attributable to the special assessment and the CME requirement.
(2) Financial Statements . . . Reviewed and approved the final statements for November 1989.
(3) Federal Budget Reconciliation . . . Stated that an unabridged version of the report is available upon request.
(4) Legislation . . . Noted the following: S-2936 (Medical Licensing Reform) is pending final passage in the Assembly, then it will go to the Senate, and the governor; and concerning the medical waste registration fee schedule, most physicians would pay $100 annually.
(5) Litigation . . . Discussed litigation on the malpractice surcharge; PRO versus MSNJ; MSNJ versus the State Board of Physical Therapy; and PRO versus Diaz (sanctioned by PRO for a violation at Salem Hospital).
(6) Physicians' Health Program Offices . . . Authorized construction of the office suite for the Physicians' Health Program due to program growth.
(7) CME . . . Stated that MSNJ has been notified of continued recognition for two years by the Committee on Review and Recognition of the ACCME.
(8) Referring Physician Identifier Numbers (Medicare) . . . Noted that physicians should check listings in the Pennsylvania Blue Shield booklet for accuracy.

Special Reports . . . Received reports from the University of Medicine and Dentistry; the New Jersey Hospital Association, and the Academy of Medicine of New Jersey.

Committee on Utilization Review Systems . . .

(1) Physician Attestation . . . Approved the following recommendations from the Committee, with editorial changes (noted in italics):

That the attestation clause be printed on, or attached to, the bottom of the face sheet of the patient's chart (rather than having a separate computer-generated face sheet) so that the physician attests only to *that* which he himself has written.

That physicians be informed *by the Medical Society of New Jersey* that when signing an attestation form, they are attesting to the best of their knowledge that the diagnoses and procedures shown on the patient's chart are accurate.

(2) AXIOM REVIEW Quality Assurance Plan . . . Approved the following:

That the Medical Society of New Jersey Executive Committee contact the Commissioner of Health and request that all state-certified utilization review organizations have appropriate due process in their written quality assurance plans.

Senior Citizens Task Force . . . Approved the following recommendation from the Task Force:

That the problems of senior citizens as discussed by the Senior Citizens Task Force be communicated to the membership in a form and frequency to be determined subsequently.

Committee on Biomedical Ethics . . . Approved cosponsorship of the seminar, noting that it will not involve any financial expenditure on the part of the Medical Society of New Jersey:

That MSNJ cosponsor the Citizens' Committee on Biomedical Ethics, Inc., seminar entitled, "In the Patient's Best Interest—Partners in the Continuum of Caring," scheduled to be held on January 31, 1990, at Princeton University.

New Business . . . Voted to donate $1,000 gift to the Physicians' Health Program of the Medical Society of New Jersey.

UMDNJ NOTES

A daily dose of the drug deprenyl can delay significantly the progress of Parkinson's disease. This important discovery was announced by investigators at UMDNJ-Robert Wood Johnson Medical School and Robert Wood Johnson University Hospital. They were among 28 nationwide centers participating in a federally funded study.

Started in 1985, the study of 800 patients with early Parkinson's disease revealed that a daily dose of 10 mg of deprenyl significantly delayed the onset of the more serious signs of the disease.

The protective effect of deprenyl is the second anti-Parkinson use of this drug tested at the New Brunswick-based medical school. Based on UMDNJ studies, we know the drug can lessen some of the motor fluctuations encountered in the middle and advanced stages of the disease. This previous research was the basis for the Food and Drug Administration's approval to prescribe deprenyl for advanced cases.

The latest study, called DATATOP (Deprenyl and Tocopherol Anti-Oxidative Therapy of Parkinsonism), is a clinical trial of the Parkinson study group, sponsored primarily by the National Institute of Neurological Disorders and Stroke of the National Institutes of Health. The study group, comprising 28 United States and Canadian universities and hospitals, is designed to test the effects of deprenyl and tocopherol, a form of vitamin E, on patients with early symptoms of Parkinson's disease. The benefits of tocopherol have yet to be assessed.

A new Ozone Research Center has been started at the Piscataway-based Environmental and Occupational Health Sciences Institute (EOHSI), operated by UMDNJ and Rutgers University. The Center will be the focal point for major ozone-related research in New Jersey and the Northeast. It will pursue basic and applied research on such ozone issues as the chemical formation and destruction of ozone, atmospheric transport of ozone and its precursors, and human exposure to ozone.

The Center has been established through a five-year, $450,000 grant from the New Jersey Department of Environmental Protection and will be headed by Dr. Paul J. Lioy, director of EOHSI's Exposure Measurement and Assessment Division and professor of environmental and community medicine at UMDNJ-Robert Wood Johnson Medical School.

UMDNJ broke ground last month for a new, reduced-cost child care center to serve students, faculty and staff. It is expected to be the flagship for similar services at each of the University's three campuses. In Newark, a freestanding child care center will be erected on land leased from the University. Being built and managed by Kinder-Care Learning Centers, the nation's largest proprietary child care provider, the facility is scheduled to open in March.

Michael S. Katz, UMDNJ's director of student financial aid, has been appointed to the National Advisory Committee on Student Financial Assistance. Mr. Katz, who has directed student finanical aid at UMDNJ for ten years, serves on the Association of American Medical College's Committee on Student Financial Assistance and its subcommittee on Student Loan Default. He also is a member of the Department of Higher Education's Loan Advisory Committee and its Martin Luther King Physician/Dentist Scholarship Program. ☐ Stanley S. Bergen, Jr, MD

MSNJ ASSESSMENT

According to a directive from the Board of Trustees of the MSNJ, the following is a list of Society members who have not paid the special assessment:

Bergen County

Antler, Arthur S, MD
Apovian, John, MD
Banschick, Harry, MD
Barrett, Joan, MD
Behnam, Kazem K, MD
Berrin, Victoria L, MD
Bufalo, Joanna, MD
Carluccio, Charles Goldhammer, MD
Chenen, Stephen H, MD
Cuddihy, Kathleen Virginia, MD
De Luca, Vincent A, MD
De Mauro, Peter J, MD
De Mayo, Joseph M, MD
Epstein, Menachem Yakov, MD
Glassman, Ronald, MD
Gonzales, Optaciano Chipeco, MD
Grosso, Joseph, MD
Harris, Robert M, MD
Heldman, Jay P, MD
Kozam, Robert Leslie, MD
Lanza, Frank J, MD
Levy, Albert, MD
Massarelli, Lucian George, MD
Natoli, Dennis T, MD
Palad-Doiranlis, Zenaida, MD
Paltrowitz, Irving M, MD
Parian, Joseph M, MD
Penny, John L, MD
Ravits, Margaret, MD
Rosenberg, Seligman, MD
Sethi, Virender, MD
Siegel, Jerald, MD
Slater, John G, MD
Sofianides, Thomas, MD
Spierenburg-Remmerde, Ruth, MD
Sung, Ui Joon, MD
Terrin, Bruce N, MD
Valdes, Aurelio, MD
Walsh, Patrick M, MD
Wang, Kyu Sung, MD
Weinstock, Murray, MD

Burlington County

Addis, David J, MD
Brill, Robert F, MD
Cohen, Douglas Jay, MD
Cynn, Jhin Jha, MD
Evans, II, Nathaniel R, MD
Fish, Frank H, MD
Grossman, Leonard, MD
Hanasoge, Lakshmi A, MD
Koss, James C, MD
LaManna, Margaret, MD
Levine, Richard T, MD
Lynch, Roberta M, MD
Meltsner, Gilbert, MD
Miller, William B, DO
Puttaswamy, Dunthur M, MD
Ryan, Kathleen, MD
Tangco, Evacueto P, MD
Topiel, Martin S, MD
Zagerman, Abraham J, MD

Camden County

Addiego, Frank J, MD
Armstrong, James S, MD
Aseron, Reynaldo A, MD
Blum, Stuart F, MD
Brennan, Jr, Charles LS, MD
Cajulis, Arthur B, MD
Cypel, David, MD
Enriquez, Carlos A, MD
Fisher, Thomas F, MD
Friedman, Harold S, MD
Gillerlain, Joseph Anthony, MD
Glass, Harvey, MD
Hong, Robert S, MD
Liberi, Ercole Joseph, MD
Mc Clure, A. Gregory, MD
Meredith, J. Rodney, MD
Moheimani, Hessam, MD
Rosenberg, Anne L, MD
Santos, Rodrigo R, MD
Siemons, Gary O, MD
Tama, Albert R, MD
Trunzo, Thomas Harold, MD
Wiener, Leslie, MD

Cumberland County

Chmelewski, Anthony Edward, MD
Huston, Jr, Donald C, DO
Mazer, Howard, MD
Pavlin, Walter, MD
Read, John H, MD
Stewart, Robert M, MD
Torres-Zayas, Francisco J, MD

Essex County

Aduna-Yap, Norma S, MD
Asaadi, Mokhtar, MD
Ashendorf, Douglas, MD
Atehortua, Diego, MD
Atherley, Trevor H, MD
Bell, Alvin, MD
Brown, Thomas F, MD
Cabrera, Lilia Ventura, MD
Caprio, Anthony AF, MD
Chang, Ya-Horng, MD
Charles, Seymour, MD
Cho, Dong W, MD
Clemente, Celestino, MD
Compagnone, Franco, MD
Cooney, Mary E, MD
De Guzman, Daisy, MD
De La Cruz, Jr, Catalino L, MD
Decter, Edward M, MD
Di Giacomo, William A, MD
Di Gregorio, Frank, MD
Dix, Jacquelyn E, MD
Fan, Foun-Chung, MD
Fein, Eric N, MD
Flora, Alphonse Ronald, MD
Frankel, Howard Jonathan, MD
Goldfarb, Irvin D, MD
Griffith, William H, MD
Hanauer, Lonnie B, MD
Harris, Michael, MD
Iqbal, Shamin, MD
Jain, Sudesh S, MD
Jerez, Cesar Julio, MD
Karetzky, Monroe S, MD
Keller, M. Mahboubi, MD
Kelly, Jr, Leo, MD
Kim, Kun, MD
Kirschner, Marvin A, MD
Krawczuk, Roman J, MD
Lagman-Lising, Librada N, MD
Miller, Philip M, MD
Modi, Mahendra R, MD
Modny, Cynthia J, MD
Napuli, Maximo C, MD
Nicoll, Anca M, MD
Oana, Dan C, MD
Orleans, Julian, MD
Park, Yong Moo, MD
Patel, Chandrakant, MD
Pecora, AM, MD
Pitoscia, Thomas, MD
Prasad, Sheo Shanker, MD
Rios, Jose, MD
Rizvi, Masood A, MD
Samady, Abdul R, MD
Samson, Cesar R, MD
Savino, Leonard, MD
Scoppetuolo, Michael H, MD
Segen, Joseph, MD
Sesta, Hee-Ja, MD
Sheng, Kung Tso, MD
Solomon, Normand Norris, MD
Strauss, Bernard S, MD
Suwanee, Sue, MD
Thomas, Alapatt P, MD
Tolentino, Eduardo D, MD
Wurzel, Bernard S, MD
Wychulis, Adam R, MD
Yap, Agustin U, MD

Gloucester County

Buxbaum, Howard H, MD

Hudson County

Arias, Arturo A, MD
Baker (Abubaker), Azzam A, MD
Bankier, Mark, MD
Behin, Fereidoon, MD
Blank, Ellen, MD
Calizo, Ulderico E, MD
Cherne, Vadim, MD
Corteza-Malantic, Vivina, MD
De Angelis, Silvio, MD
Gadhok, Kanwaljit, K, MD
Hashemiyoon, Ahmad, MD
Iyengar, Devarajan, MD
Mahan, Kenneth Wells, MD
Mark, David Nuen Yuk, MD

Masson, Lalitha, MD
Medrano, Eduardo V, MD
Perez-Mendez, Jesus, MD
Prakash, Anaka KR, MD
Salomon, Hubert, MD
Serafino, Vincent, MD
Soberano, Alfonso J, MD
Sowa-Wandycz, Ewa Barbara, MD

Hunterdon County

Doyle, Louis Philip, MD
Goger, Pauline Rohm, MD
Huttner, Ruby P, MD
Quinn, Brian M, MD

Mercer County

Bada, Jr, Laureto S, MD
Battin, Keith Gierhart, MD
Brown, William Charles, MD
Buzard, Thomas A, MD
Chaudry, Mohammad Hanif, MD
Christie, Alfred Douglas, MD
De Blasio, Joseph M, MD
De Goma, Rolando L, MD
Di Biase, John J, MD
Faraoniw, Bohdan, MD
Fraser, Leon, MD
German, Elaine U, MD
Gilfillan, Richard J, MD
Gupta, Vinod K, MD
Hagaman, John F, MD
Hoyos, Fernando, MD
Hutchison, Dwight C, MD
Jaferi, Ghazanfar A, MD
Kent, David W, MD
Kososky, Charles S, MD
Laurente, Romeo V, MD
Laurente, Cristeta A, MD
Lien, Hosanna W, MD
McCabe, Jonathan, MD
Saltstein, Elliott S, MD
Talwani, Muhammad Y, MD
Thirugnanam, Saraswathi, MD
Tsai, Thomas C, MD
Victor, Carl H, MD
Williams, Paul T, MD

Middlesex County

Babiak, Eugenia T, MD
Brody, Herbert Stephen, MD
Cho, Seung C, MD
Choi, Stanley SW, MD
Cioffi, Francis J, MD
De Guzman, Jaime L, MD
Dugenio, Jose E, MD
Fabbro, Leo A, MD
Feldman, Mark A, MD
Fernandez, Manuel A, MD
Galli, Thomas George, MD
Gandhi, Hans R, MD
Karu, Moiz S, MD
Lenger, Ellis S, MD
Lenz, Paul R, MD
Lin, Pei-Zin, MD
Lo, Jiun H, MD
Maing, Basil Sungyoul, MD
Mannesmann, Olive AL, MD
Miller, George Stuart, MD
Nebab, Nester C, MD
Patel, Purushottam C, MD
Payumo, Carmelino C, MD
Romano, Joseph P, MD
Salcie, Francisco A, MD
Singer, Jack M, MD
Tan, Evelyn R, MD
Turkish, Sheldon C, MD
Uchida, Toru A, MD
Weinberg, Frederick M, MD
Wu, Jung-Yi, MD

Monmouth County

Colmer, Marc E, MD
Gopalakrishnan, Sivasubramaniam, MD
Hong, Sunok, MD
Knapp, Herbert Arnold, MD
Morgenstern, Alvin H, MD
Ollins, Gerald H, MD
Pertchik, Alan F, MD
Pomerantz, Allen C, MD
Rangam, Tsui H, MD
Scher, Charles Z, MD
Wandycz, Tadeusz, MD

Morris County

Chen, Wen L, MD
Crotty, Martin J, MD
Englestein, Eric Steven, MD
Falbo, Ann, MD
Gerwin, Kenneth S, MD
Hnat, Richard F, MD
Kidwell, Allyn Perry, MD
Lim, Dong-Won, MD
Menkin, Allen, MD
Michelstein, Martin A, MD
Migliardi, Joseph R, MD
Olivia, Joseph V, MD
Penek, John, MD
Uygur, Ihsan Mustafa, MD
Wallis, Joseph J, DO
Waran, Sandy P, MD
Yazdan-Parasti, Esfandiar, MD

Ocean County

El-Kharboutly, Mohamed M, MD
Lygas, Theodore B, MD
Motley, John Paul, MD
Pittella, Anna N, MD
Schenker, Samuel D, MD
Scher, Stephen M, MD

Passaic County

Bautista, Estrella D, MD
De Silva, Nihal K, MD
Kang, Byung K, MD
Mohtashemi, Hormoz, MD
Morski, Richard, MD
Nelson, Geraldine I, MD
Pajoohi, Manoochehr, MD
Pajoohi, Soheil, MD
Rapacon, Magdaleno R, MD
Tandon, Ramesh C, MD
Toombs, James Raye, MD
Tseng, William P, MD
Uhm, Kyudong, MD
Wu, Yieu C, MD

Salem County

De Castro, Amante, MD

ARE YOU MOVING?

If so, please send a change of address to *NEW JERSEY MEDICINE,* Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648, at least six weeks before you move.

Name ____________________

Old Address ____________________

City ____________________ State __________ Zip __________

New Address ____________________

City ____________________ State __________ Zip __________

Park, Young Ja, MD

Somerset County

Beiter, Deborah A, MD
Chaudhry, Mohammad A, MD
Choi, Chanam L, MD
Ohki, Stephen K, MD

Sussex County

De Long, II, Donald H, MD
Digby, Thomas E, MD
Shivashankara, Birur M, MD
Sugar, Donald Andrew, MD

Union County

Archer, Rudolph, MD
Baird, Harry Leverton, MD
Liemer, Martin Daniel, MD
Mehta, Uday C, MD
Zarafu, Ilana W, MD ☐

PLACEMENT FILE

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physicians. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY

Hak Joo Cha, MD, 22 Hamilton Ct., Lawrenceville, NJ 08648. Catholic Medical College 1972. Board eligible. Solo, partnership, group, fee-for-service. Available.

CARDIOLOGY

Fredric Gerewitz, MD, 125 Montgomery Ave., Bala Cynwyd, PA 19004. SUNY-Downstate 1984. Board eligible. Group or partnership. Available July 1990.

Matilda M. Taddeo, MD, 2269 Ellis Ave., Bronx, NY 10462. West Indies 1983. Board eligible. Group or partnership. Available.

GASTROENTEROLOGY

Eric Avezzano, MD, 2510 B.S. Walter Reed Dr., Arlington, VA 22206. SUNY-Stony Brook 1985. Board eligible; board certified (IM). Group, partnership, solo. Available July 1990.

INTERNAL MEDICINE

Albert S. Ford, MD, 943 Norway Ave., Huntington, WV 25703. Meharry Medical College 1982. Board eligible. Solo or practice purchase. Available June 1990.

Himanshu Shah, MD, 71 Louis St., New Brunswick, NJ 08901. UMDNJ 1988. Part-time position. Available.

NUCLEAR MEDICINE

Robert W. Cifers, MD, 26 Somers Ave., Seaville, NJ 08230. Ohio State 1983. Board eligible. Available.

OTOLARYNGOLOGY

Samuel H. Selesnick, MD, 450 East 63rd St., #8F, New York, NY 10021. NYU 1985. Board eligible. Available July 1990.

PATHOLOGY

Ruth Kreitzer-Richards, MD, 5470 Mosholu Ave., Riverdale, NY 10471. Guadalajara 1983. Board certified. Available July 1990.

1990 MSNJ ANNUAL MEETING

Saturday, May 5, 1990

3:30 p.m.	Board of Trustees' Meeting
7:00 p.m.	Officers' Cocktail Reception and Dinner

Sunday, May 6, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
10:00 a.m.	Educational Program
11:00 a.m.	Exhibits Open
1:00 p.m.	House of Delegates
3:30 p.m.	Reference Committee Meetings

Monday, May 7, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates (Election)
12:00 noon	Golden Merit Award Ceremony and Reception
1:00 p.m.	Professional Liability Program (MIIENJ)
2:45 p.m.	Reference Committee Meetings
5:00 p.m.	JEMPAC Political Forum
5:45 p.m.	JEMPAC Wine and Cheese Reception
6:30 p.m.	Somerset County Medical Society

Tuesday, May 8, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates
1:30 p.m.	House of Delegates
2:00 p.m.	Exhibits Close
6:30 p.m.	Inaugural Reception and Dinner

Wednesday, May 9, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	General Session
1:00 p.m.	Board of Trustees' Meeting

HOUSING APPLICATION

224th ANNUAL MEETING
MEDICAL SOCIETY OF NEW JERSEY
MAY 6-9, 1990

Select the hotel of your choice. Mail the entire form with one night's deposit to that hotel.

THE SANDS HOTEL, CASINO & COUNTRY CLUB (Headquarters Hotel)

INDIANA AVE. AT BRIGHTON PARK, P.O. BOX 28, ATLANTIC CITY, NJ 08404
RESERVATION DEPARTMENT 1-800-257-8580

(Please Print)

Name ______________________________

Address ______________________________

City ______________________ State ____________ Zip ________

Home Phone ______________ Business Phone ______________

Sharing With ______________________________

Date of Arrival ______________ Time ______________

Date of Departure ______________ Time ______________

A one-night deposit (equivalent to room rate) is required with all reservation requests. Please send check or money order payable to the **SANDS** or complete the following:

American Express No. ______________________ Expiration Date ______________

SCHEDULE OF RATES SUBJECT TO 12% TAX

☐ SINGLE **$75.00** ☐ One-Bedroom Suite **$225.00** ☐ Two-Bedroom Suite **$300.00**

☐ DOUBLE **$75.00 (Reservations must be received prior to April 6, 1990)**

Check-out time is 12 Noon. Rooms may not be available for check-in until after 3 p.m. Check-in time on Sundays is 6 p.m. FORTY-EIGHT (48) HOURS NOTICE OF CANCELLATION is required for a full refund.

PARKING: FREE PARKING TO REGISTERED GUESTS. One car per room.

☐ Check if Official Delegate County ______________________

* *

CLARIDGE CASINO HOTEL

INDIANA AVE. AT THE BOARDWALK, P.O. 448, ATLANTIC CITY, NJ 08404
RESERVATION DEPARTMENT (609) 340-3434
NJ ONLY 1-800-582-7676

(Please Print)

Name ______________________________

Address ______________________________

City ______________________ State ____________ Zip ________

Home Phone ______________ Business Phone ______________

Sharing With ______________________________

Date of Arrival ______________ Time ______________

Date of Departure ______________ Time ______________

A one-night deposit (equivalent to room rate) is required with all reservation requests. Please send check or money order payable to the **CLARIDGE** or complete the following:

Card # ______________ Type ______________ Exp. Date ______________

SCHEDULE OF RATES SUBJECT TO 12% TAX

☐ SINGLE **$75.00** ☐ One-Bedroom Suite **$225.00** ☐ Two-Bedroom Suite **$300.00**

☐ DOUBLE **$75.00 (Reservations must be received prior to April 5, 1990)**

Check-out time is 12 Noon. Rooms may not be available for check-in until after 3 p.m. Check-in time on Sundays is 6 p.m. FORTY-EIGHT (48) HOURS NOTICE OF CANCELLATION is required for a full refund.

PARKING: FREE PARKING TO REGISTERED GUESTS. One car per room.

☐ Check if Official Delegate County ______________________

CONTINUING EDUCATION

ANESTHESIOLOGY

March

24- **Annual Postgraduate**
25 **Anesthesia Seminar**
All day—The Hyatt, Cherry Hill
(New Jersey State Society of Anesthesiologists)

CARDIOLOGY

March

14 **Advanced Cardiac Life Support**
21 All day—Freehold Area Hospital, Freehold
(Freehold Area Hospital)

DERMATOLOGY

March

21 **Robert Wood Johnson Medical School Dermatological Conferences**
6-9 P.M.—Rutgers Community Health Plan, US #1, New Brunswick
(UMDNJ)

April

18 **Robert Wood Johnson Medical School Dermatological Conferences**
6-9 P.M.—Rutgers Community Health Plan, US #1, New Brunswick
(UMDNJ)

INFECTIOUS DISEASE

April

4 **Counseling and Testing for HIV Infection**
11:30 A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ and NJDOH)

20 **Clinical Management of HIV Infection**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(AMNJ and NJDOH)

MEDICINE

March

1 **Colitis**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

2 **Continuing Medical**
9 **Education Program**
16 12 Noon-1 P.M.—South Jersey
23 Hospital System, Bridgeton
30 *(South Jersey Hospital System)*

6 **Fourth Annual Internal**
13 **Medicine Update and**
20 **Board Review**
27 5:30-7:30 P.M.—Cooper Hospital, Camden
(Cooper Hospital/UMDNJ)

7 **Internal Medicine**
14 **Review Course**
21 4-7 P.M.—University Hospital,
28 New Brunswick
(AMNJ and UMDNJ)

7 **Diabetes-Related Kidney Disease**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ and NJDOH)

7 **Prevention of Lower Extremity Amputations**
11:30 A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ and NJDOH)

7 **Medical Lecture Series**
14 10:30-11:30 A.M.—Christ
21 Hospital, Jersey City
28 *(Christ Hospital)*

8- **Annual Meeting and Scientific**
11 **Assembly, New Jersey Academy of Family Physicians**
Caesar's Palace, Atlantic City
(NJ Academy of Family Physicians)

8 **Update on Geriatric Medicine**
22 4:30-6:30 P.M.—Cooper Hospital, Camden
(Cooper Hospital/UMDNJ)

9 **Alcoholism**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

9 **Functional Assessment of the Elderly**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ)

9 **Rheumatology Case Presentation Conference**
12:15-1:15 P.M.—Kennedy Memorial Hospital, Stratford
(UMDNJ and Kennedy Memorial Hospital)

12 **Thyroid Disease**
1-2 P.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ)

13 **Renal Biopsy Conferences**
12:30-2 P.M.—Barnert Memorial Hospital Center, Paterson
(Barnert Memorial Hospital Center)

14 **Dialogues in Critical Medical Decisions**
7:30-9 P.M.—Englewood Hospital, Englewood
(Englewood Hospital)

14 **Diabetes-Related Kidney Disease**
11:30-A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ and NJDOH)

14 **Chronic EBV Virus**
10:30-11:30 A.M.—University Hospital, New Brunswick
(AMNJ)

15 **Diabetes-Related Kidney Disease**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ and NJDOH)

15 **Aspiration Syndrome in the Mentally Retarded**
1:30-2:30 P.M.—Vineland Developmental Center, Vineland
(AMNJ)

15 **Continuing Medical Education Series**
12 Noon—Somerset Medical Center, Somerville
(Somerset Medical Center)

16 **Management of Abdominal Emergencies**
1-2 P.M.—Woodbridge Developmental Center, Woodbridge
(AMNJ)

17- **Annual Meeting, American**
18 **College of Emergency Physicians**
All day—Trump Plaza Hotel & Casino, Atlantic City
(American College of Emergency Physicians)

JEFFERSON MEDICAL COLLEGE
OF
THOMAS JEFFERSON UNIVERSITY
Department of Neurology
presents
Reflex Sympathetic Dystrophy: Current Strategies in Diagnosis and Treatment
March 9 and 10, 1990
at
Jefferson Medical College
McClellan Hall
Program Directors:
Robert J. Schwartzman, M.D.
Robert L. Knobler, M.D., Ph.D.
Audrey F. Thomas, B.A., R.N.

For further information contact:
The Office of Continuing Medical Education
1025 Walnut Street, Room G3
Philadelphia, PA 19107
215-928-6992

AMPC ADVANCED MANAGEMENT PROGRAM FOR CLINICIANS

at NYU

AMPC is a Master's Degree program for clinicians who want to build the skills that will allow them to act upon (rather than just react to) changes in the health care sector. AMPC:

- Leads to an MS degree in health policy and management.
- Provides training in financial analysis, quality assurance, information systems, marketing, management, policy and more.
- Offers courses in the evenings and on Saturdays to accommodate clinicians' busy schedules.

For more information about AMPC, call
(212) 998-7460.

American Diabetes Association.

Greater Philadelphia Affiliate

Presents

Annual Scientific Symposium

March 17, 1990
Four Seasons Hotel, Philadelphia

Main Lecturer and Honoree: Arthur H. Rubenstein, M.D.
Topic: Pro Insulin, C-Peptide, and Amylin in Diabetes

Other Topics Include: "Lipids and Diabetes"
"Update on Pregnancy and Diabetes"
"Diabetes and Exercise: Therapeutic Implications"
"Albuminuria, Hypertension, and the Genesis of Diabetic Kidney Disease"

For More Information Call: **Lynette Lawrence (215) 557-8070**

17 **Morbidity and Mortality**
24 **Conference**
8:30-10 A.M.—New Jersey Medical School, Newark
(UMDNJ)

20 **Renal Adaptation to Ventilatory Response to Metabolic Acid-Base Disorders**
6:30-9:30 P.M.—Overlook Hospital, Overlook
(AMNJ)

21 **Retinopathy**
11:30 A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ)

22 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center)

30 **Clinicopathologic Case Presentation**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

April

3 **Fourth Annual Internal**
17 **Medicine and Board Review**
24 5:30-6:30 P.M.—Cooper Hospital, Camden
(Cooper Hospital/UMDNJ)

4 **Living Wills**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

4 **Medical Lecture Series**
11 10:30-11:30 A.M.—Christ
18 Hospital, Jersey City
25 *(Christ Hospital)*

4 **Internal Medicine**
11 **Review Course**
18 4-7 P.M.—University Hospital,
25 New Brunswick
(AMNJ and UMDNJ)

5 **Immunology**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

6 **Burns**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

6 **Continuing Medical**
13 **Education Program**
20 12 Noon-1 P.M.—South Jersey
27 Hospital System, Bridgeton
(South Jersey Hospital System)

10 **Renal Biopsy Conferences**
12:30-2 P.M.—Barnert Memorial Hospital Center, Paterson
(Barnert Memorial Hospital Center)

11 **Dialogues in Critical Medical Decisions**
7:30-9 P.M.—Englewood Hospital
(Englewood Hospital)

12 **Update on Geriatric Medicine**
26 4:30-6:30 P.M.—Cooper Hospital, Camden
(Cooper Hospital/UMDNJ)

17 **Unresolved Problems in Acute Renal Failure**
6:30-9:30 P.M.—Overlook Hospital, Overlook
(AMNJ)

18 **Fluid and Electrolyte Disorders**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

18 **Amputee Rehabilitation and Prevention**
2-3 P.M.—John E. Runnells Hospital of Union County, Berkeley Heights
(AMNJ)

19 **Nephropathy**
2-3 P.M.—Woodbridge Developmental Center, Woodbridge
(AMNJ)

19 **Continuing Medical Education Series**
12 Noon—Somerset Medical Center, Somerville
(Somerset Medical Center)

19 **Endocrinology**
11 A.M.-12 Noon—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center)

20 **Drug-induced Lupus**
12:15-1:15 P.M.—Kennedy Memorial Hospital, Stratford
(UMDNJ and Kennedy Memorial Hospital)

21 **Morbidity and Mortality**
28 **Conference**
8:30-10 A.M.—New Jersey Medical School, Newark
(UMDNJ)

21- **Advances in Gastrointestinal**
22 **Disorders**
8 A.M.-5 P.M.—Robert Wood Johnson Medical Center, Piscataway
(UMDNJ)

23 **Nephropathy**
1-2 P.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ)

26 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center)

26- **Lyme Disease Symposium**
27 8:30 A.M.-5 P.M.—Robert Wood Johnson Medical School, Piscataway
(UMDNJ)

OBSTETRICS AND GYNECOLOGY

March

9- **Annual Semmelweiss-Waters**
11 **Ob/Gyn Conference**
8 A.M.-5 P.M.—Bally's Grand Hotel, Atlantic City
(UMDNJ)

ONCOLOGY

March

9 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley Hospital Center, Sussex
(Wallkill Valley Hospital Center)

14 **Tumor Board Conference**
11 A.M.-12 Noon—Memorial Hospital of Salem County, Salem
(Memorial Hospital of Salem County)

22 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(Newcomb Medical Center)

28 **Dinner Meeting**
6:30-9:30 P.M.—The Hyatt, New Brunswick
(Radiation Oncology Section—AMNJ)

April

11 **Tumor Board Conference**
12 Noon-1 P.M.—Memorial Hospital of Salem County, Salem
(Memorial Hospital of Salem County)

13 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley Hospital Center, Sussex
(Wallkill Valley Hospital Center)

26 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(Newcomb Medical Center)

26 **Dinner Meeting**
6:30-9:30 P.M.—The Hyatt, New Brunswick
(AMNJ—Head and Neck Oncology Section)

ORTHOPEDICS

April

17- **Annual Spring Meeting**
22 Royal Antiqua Hotel, Antiqua
(New Jersey Orthopaedic Society)

PEDIATRICS

March

1 **Pediatric Grand Rounds**
8 8:30-9:30 A.M.—Robert Wood
15 Johnson Medical School, MEB,
22 102, New Brunswick
29 *(UMDNJ)*

Hahnemann University

Department of Medicine

WEDNESDAYS GRAND ROUNDS

8:30 A.M.-9:30 A.M.
February-May 1990

FEBRUARY 1990

February 7, 1990

SOMATOSTATIN, CARCINOID SYNDROME
John Oates, M.D.
Professor & Chairman
Department of Medicine
Vanderbilt University

February 14, 1990

LYME DISEASE
Steven Billstein, M.D., MPH
Associate Professor of Medicine
Columbia Presbyterian Medical Center

February 21, 1990

NEOPLASTIC DISEASE ADVANCES IN THERAPY
Isedore Brodsky, M.D.
Professor of Medicine
Department of Neoplastic Diseases
Director, Institute of Cancer & Blood Diseases
Hahnemann University

February 28, 1990

CLINICAL PATHOLOGIC CONFERENCE
Chief Residents:
Michael DeAngelis, M.D.
Ana Nunez, M.D.
Ralph McKibben, M.D.
Matthew Sandler, M.D.

MARCH 1990

March 7, 1990

IMMUNE INTERVENTION IN TYPE I DIABETES MELLITUS
Jay S. Skyler, M.D.
Professor of Medicine
Director, Diabetes Mellitus
University of Miami

March 14, 1990

COPD: PATHOGENESIS AND TREATMENT ADVANCES
Merk J. Utell, M.D.
Professor of Medicine and Toxicology
University of Rochester

March 21, 1990

CLINICAL PHARMACOLOGY
Vincent J. Zerro, M.D., Ph.D.
Associate Professor of Pharmacology & Medicine
Director, Division of Clinical Pharmacology
Hahnemann University

March 28, 1990

DERMATOLOGIC TREATMENT WITH RETINOIDS AND CYCLOSPORINE
Richard L. Spielvogel, M.D.
Professor of Medicine and Dermatology
Director, Division of Dermatology
Hahnemann University

APRIL 1990

April 4, 1990

CARDIAC ELECTROPHYSIOLOGY: EVOLVING DIAGNOSTIC AND THERAPEUTIC MODALITIES
John D. Fisher, M.D.
Professor of Medicine
Director, Cardiac Arrhythmia Service
Acting Director, Division of Cardiology
Montefiore Medical Center

April 11, 1990

MEDICAL MANAGEMENT OF GALLSTONE DISEASE
Hans Fromm, M.D.
Professor of Medicine
Director, Division of Gastroenterology
The George Washington University

April 18, 1990

ENDOCRINOLOGY AND METABOLISM: RECENT ADVANCES
Leslie I. Rose, M.D.
Professor of Medicine
Director, Division of Endocrinology and Metabolism
Jeffrey L. Miller, M.D.
Associate Professor of Medicine
Division of Endocrinology and Metabolism
Hahnemann University

April 25, 1990

TREATMENT OF DIFFICULT GRAM NEGATIVE BACTERIAL INFECTIONS
Williem E. Dismukes, M.D.
Professor & Vice Chairman for Educational Programs
Department of Medicine
University of Alabama

1990—WEDNESDAY—1990 MEDICAL SEMINAR SERIES

8:30 A.M.-3:00 P.M.

March 7, 1990
DIABETES MELLITUS: Immune Mechanisms & Insulin Therapy Innovations

March 28, 1990
DERMATOLOGY: Treatment with Retinoids and Cyclosporine

April 25, 1990
DIFFICULT GRAM NEGATIVE AND FUNGAL INFECTIONS

May 9, 1990
IMMUNOTHERAPY AND KIDNEY TRANSPLANTATION

Presented by:
William S. Frenkl, M.D.
Professor of Medicine and Chairman
Department of Medicine
Allen B. Schwartz, M.D.
Professor of Medicine and
Director, Continuing Medical Education
Department of Medicine

Location:
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2nd Floor—College Bldg.
Hahnemann University
15th Street Entrance
15th and Vine Streets
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20 **Third Annual Perspectives on Sudden Infant Death Syndrome**
8:30 A.M.-3:15 P.M.—Robert Wood Johnson Medical School, Piscataway
(UMDNJ)

21 **Neonatal Resuscitation and Stabilization**
7:30 A.M.-5:15 P.M.—New Jersey Medical School, Newark
(UMDNJ)

22 **Update in Aspects of Pediatrics**
Marriott Hotel, Saddle Brook
(Northern NJ Pediatric Society)

22 **Children's Vision Disorders**
8:30 A.M.-3:30 P.M.—Robert Wood Johnson Medical School, Piscataway
(UMDNJ)

April

5 **Pediatric Grand Rounds**
12 8:30-9:30 A.M.—Robert Wood
19 Johnson Medical School, MEB,
26 102, New Brunswick
(UMDNJ)

11 **Learning Disabilities**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

18 **Neonatal Resuscitation and Stabilization**
7:30 A.M.-5:15 P.M.—New Jersey Medical School, Newark
(UMDNJ)

19 **Update in Aspects of Pediatrics**
Marriott Hotel, Saddle Brook
(Northern NJ Pediatric Society)

PSYCHIATRY

March

1 **Case Seminars To Improve**
15 **Psychotherapeutic Technique**
8-10 P.M.—2 West Northfield Road, Livingston
(Advanced Psychiatric Study Group)

6 **Psychiatry Grand Rounds**
13 8:30-10 A.M.—Elizabeth General
20 Medical Center, Elizabeth
27 *(Elizabeth General Medical Center)*

16 **Teenage Suicide**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

April

3 **Psychiatry Grand Rounds**
10 8:30-10 A.M.—Elizabeth General
17 Medical Center, Elizabeth
24 *(Elizabeth General Medical Center)*

5 **Case Seminars To Improve**
19 **Psychotherapeutic Technique**
8-10 P.M.—2 West Northfield Road, Livingston
(Advanced Psychiatric Study Group)

18 **Psychiatry and the Law**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

PULMONOLOGY

March

2 **18th Annual Joint Conference New Jersey Thoracic Society/ New Jersey Chapter of the American College of Chest Physicians**
Hyatt Regency, New Brunswick
(New Jersey Thoracic Society)

RADIOLOGY

March

15 **1989-1990 Scientific Meeting**
7:30-9:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of New Jersey-Diagnostic Section, AMNJ)

22 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center)

31 **Seeing the Unseen: Noninvasive Vascular Imaging in the 90s**
8 A.M.-4 P.M.—The Ramada Renaissance, East Brunswick
(AMNJ)

April

19 **1989-1990 Scientific Meeting**
7:30-9:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of New Jersey-Diagnostic Section, AMNJ)

26 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center)

SURGERY AND ITS SPECIALTIES

March

4 **Surgical Treatment of Cardiothoracic Disease**
10-11:30 A.M.—New Jersey Medical School, MSB, 506B, Newark
(UMDNJ)

6 **Weekly Vascular Case**
13 **Conference**
20 7:30-8:30 A.M.—Robert Wood
27 Johnson Medical School, MEB,
108B, New Brunswick
(UMDNJ)

17 **Morbidity and Mortality**
24 **Conference**
8:30-10 A.M.—New Jersey Medical School, MSB, 506B, Newark
(UMDNJ)

27 **Englewood Surgical Society Lecture Series**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society)

28 **Journal Club, Section of Cardiothoracic Surgery**
6:30-9:30 P.M.—2 Mountain Ridge Drive, Livingston
(UMDNJ)

April

1 **Surgical Treatment of Cardiothoracic Disease**
10-11 A.M.—New Jersey Medical School, MSB, 506B, Newark
(UMDNJ)

3 **Weekly Vascular Case**
10 **Conference**
17 7:30-8:30 A.M.—Robert Wood
24 Johnson Medical School, MEB,
108B, New Brunswick
(UMDNJ)

21 **Morbidity and Mortality**
28 **Conference**
8:30-10 A.M.—New Jersey Medical School, MSB, 506B, Newark
(UMDNJ)

24 **Englewood Surgical Society Lecture Series**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society)

25 **Journal Club, Section of Cardiothoracic Surgery**
6:30-9:30 P.M.—2 Mountain Ridge Drive, Livingston
(UMDNJ)

UROLOGY

March

2 **Urology Grand Rounds**
9 New Jersey Medical School,
16 MSB, C600, Newark
23 *(UMDNJ)*
30

21 **Urinary Tract Infections**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

April

6 **Urology Grand Rounds**
13 New Jersey Medical School,
20 MSB, C600, Newark
27 *(UMDNJ)*

18 **Annual William P. Burpeau Award Dinner and Lecture**
6 P.M.—The Manor, West Orange
(AMNJ)

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Moderator

Leonard N. Horowitz, M.D.

3:00-3:30	Yes	*Charles Gottlieb, M.D.*
3:30-4:00	No	*Philip J. Podrid, M.D.*
4:00-5:00	Case presentations—The resuscitated patient—	*Walter R. Hepp, M.D.*

Panel discussion

Michael S. Feldman, M.D.
Robert I. Katz, M.D.
Steven J. Nierenberg, M.D.

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IN MEMORIAM

Edward C. Edlkraut. Word has been received noting the death of Edward Coleman Edlkraut, MD, on November 10, 1989. Dr. Edlkraut, a retired member of our Passaic County component, was born in 1907 in Passaic. He received his medical degree from Georgetown Medical School, Washington, DC, in 1931, and was awarded his New Jersey license the following year. A pediatrician, Dr. Edlkraut was affiliated with Passaic General Hospital until his retirement to Florida in 1974. Dr. Edlkraut served in the United States Air Force from 1942 to 1946, attaining the rank of captain.

C. Clayton Griffin. At the untimely age of 35, Charles Clayton Griffin, MD, died on November 19, 1989. Dr. Griffin was head of the regional trauma center at University Hospital, Newark. He was considered the "architect" of the five-year program. Dr. Griffin also was instrumental in helping to establish the JEMSTAR Program, that placed one helicopter in Newark and one helicopter in Voorhees to provide complete medical rescue service for all of New Jersey. He was a member of our Essex County component, and of the American Medical Association, and was a fellow of the American College of Surgeons. Born in 1953, Dr. Griffin earned his medical degree at Tulane University Medical School, Louisiana, in 1978. He served an internship and residency at Maricopa County General Hospital, Arizona, from 1978 to 1983, and then relocated to New Jersey to complete a fellowship in trauma surgery at UMDNJ. Dr. Griffin was awarded his license to practice in New Jersey in 1983. He was an assistant professor of surgery at UMDNJ-New Jersey Medical School, president of the University Hospital medical staff, and a key representative on the planning board of UMDNJ's new medical office complex.

Floyd B. Gusack. At the untimely age of 55, Floyd Bruce Gusack, MD, a member of our Union County component, died on September 29, 1989. Born in Brooklyn, New York, Dr. Gusack received his medical degree from Hahnemann Medical College, Pennsylvania, in 1959, and was awarded his New Jersey license in 1960. After serving an internship at Muhlenberg Hospital, Plainfield, Dr. Gusack was an attending in ophthalmology at New York Eye and Ear Infirmary, Raritan Valley Hospital, Green Brook, John F. Kennedy Medical Center, Edison, and Muhlenberg Hospital. A diplomate of the American Board of Ophthalmology, Dr. Gusack was a member of the AMA, and a Fellow of the American College of Ophthalmology.

Elias J. Hatem. Former chief of surgical services at St. Joseph's Hospital and Medical Center, Paterson, Elias Joseph Hatem, MD, died on September 29, 1989. Before he retired in 1974, Dr. Hatem had a private medical and surgical practice in Paterson. Born in 1905 in Lebanon, Dr. Hatem and his family emigrated to the United States in 1909. He received his medical degree from Tufts University Medical School, Massachusetts, in 1929 and served an internship at St. Joseph's Hospital and Medical Center in 1929; the following year he joined the medical staff, and in 1973, St. Joseph's Hospital and Medical Center honored him with the Distinguished and Outstanding Service Award. A retired member of our Passaic County component, Dr. Hatem was a fellow of the American College of Surgeons, and a member of the AMA Association.

Albert Lewis. At the age of 89, Albert Lewis, MD, of Cranford, a member of our Union County component, died on October 28, 1989. Born in 1900 in Brooklyn, New York, Dr. Lewis was graduated from the Long Island College Medical School, in 1928, and received his license to practice medicine in New Jersey in 1929. Dr. Lewis was the oldest practicing physician in Union County when he retired in 1986; he was affiliated with three Elizabeth institutions: Alexian Brothers Hospital, St. Elizabeth Hospital, and Elizabeth General Medical Center. A family practitioner, Dr. Lewis was a member of the American Medical Association and of the Academy of Medicine of New Jersey.

Aaron Lowenstein. A member of our Essex County component, Aaron Lowenstein, MD, died on November 6, 1989. Born in 1903 in Russia, Dr. Lowenstein was awarded his medical degree at the State University of South Carolina Medical School in 1926; and received his medical license to practice in New Jersey in 1927. An obstetrician-gynecologist, Dr. Lowenstein was chief of his department at Newark Beth Israel Medical Center until retiring in 1973; while at the Medical Center, he pioneered the practice of continuous caudal anesthesia. After his retirement, he served as medical director of the North Jersey Community Union Clinic in Newark for eight years. Dr. Lowenstein was a member of the American Medical Association and was a fellow of the American Academy of Obstetrics and Gynecology.

Louis R. Panigrosso. At the grand age of 90, Louis Rocco Panigrosso, MD, died on September 30, 1989. Born in Avelino, Italy, Dr. Panigrosso moved to Perth Amboy over 50 years ago. He was awarded his medical degree from St. Louis Medical School, Missouri, in 1930 and his New Jersey license in 1931. He was affiliated with Perth Amboy General Hospital and St. Peter's Medical Center, New Brunswick. Also, he served as an educator at the Charles E. Gregory School of Nursing. A retired member of our Middlesex County component, Dr. Panigrosso was a member of the American Medical Association, and a fellow of the International College of Surgeons and of the American College of Obstetrics and Gynecology. He served as a navy captain in World War II.

Elizabeth C. Quinn. At the untimely age of 37, Elizabeth Carol Quinn, MD, of Edison, died on November 5, 1989. Dr. Quinn was a physician and medical educator of infectious disease at Muhlenberg Regional Medical Center, Plainfield. She had been on the staff of the Medical Center for six years; in addition, Dr. Quinn was a clinical associate professor at UMDNJ-Robert Wood Johnson Medical School. Born in 1952 in Cranford, Dr. Quinn was awarded her medical degree at UMDNJ-Rutgers Medical School in 1978; she received her New Jersey license the following year. Dr. Quinn was a member of our Union County component, and a fellow of the American Society for Microbiology and of the American College of Physicians. In 1988, Dr. Quinn was the recipient of the Outstanding Attending Physician Award presented by Muhlenberg Regional Medical Center.

Aaron W. Rosendale. Retired physician Aaron William Rosendale, MD, died on November 11, 1989, at the age of 71. Born in Paterson, Dr. Rosendale earned his medical degree at Marquette University School of Medicine, Wisconsin, in 1953, and in 1954 was awarded his New Jersey license. A family physician, Dr. Rosendale maintained a private practice in Paterson and for 25 years, was the administrative director of the Christian Care Center in Wyckoff. Dr. Rosendale retired from active practice in 1984; he was a member of our Passaic County component and of the American Medical Association.

Abraham B. Sand. Word has been received of the death of Abraham B. Sand, MD, on July 16, 1989. Born in 1908 in Ohio, Dr. Sand was awarded his medical degree from Temple University Medical School, Philadelphia, in 1933, and received his New Jersey license in 1937. A retired member of our Burlington County component, Dr. Sand was a family practitioner affiliated with Memorial Hospital of Burlington County, Mount Holly. In addition, he was a member of the American Medical Association.

Edward P. Shope. A member of our Camden County component, Edward Pierce Lentz Shope, MD, died on November 5, 1989. Born in 1896, in Pennsylvania, Dr. Shope received his medical degree from Johns Hopkins University School of Medicine, Maryland, in 1920; three years later he was awarded his license to practice in New Jersey. An ophthalmologist, Dr. Shope had a private practice in Haddonfield, and was affiliated with Wills Eye Hospital and Jefferson Hospital, both in Philadelphia. Dr. Shope was a diplomate of the American Board of Ophthalmology and a member of the AMA.

Irving Shulman. The chief of urology at Greenville Hospital and the Jewish Hospital and Rehabilitation Center, both in Jersey City, Irving Shulman, MD, died on November 7, 1989. Born in 1923 in Brooklyn, New York, Dr. Shulman earned his medical degree at Tulane Medical School, Louisiana, in 1946; he received his New Jersey medical license in 1948. Dr. Shulman was a diplomate of the American Board of Urology; a fellow of the American College of Surgeons, of the American Association of Clinical Urology, and of the American Society of Abdominal Surgeons; and a member of our Hudson County component and of the American Medical Association. In addition, Dr. Shulman was the former chief of the Department of Urology, Christ Hospital, Jersey City; on the staffs of Pollack Hospital, Fairmount Hospital, and St. Francis Hospital, all in Jersey City, and North Hudson Hospital, Weehawken.

Thomas A. Stanley. Word has been received of the death of Thomas A. Stanley, MD, on August 6, 1989. Born in 1917 in East Orange, Dr. Stanley was awarded his medical degree in 1943 from the New York University College of Medicine. He received his license to practice in New Jersey in 1946, after serving in the Navy as a lieutenant. A general surgeon, Dr. Stanley was affiliated with St. Mary's Hospital, Orange, and Presbyterian Hospital, Newark. Dr. Stanley was a diplomate of the American Board of Surgery, and a member of our Essex County component and of the AMA.

EDITORIAL CRITERIA

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Pages 152-155

REAL ESTATE
Pages 152-155

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AIR FORCE

MSNJ NEWSLETTER

PRO LEGAL DEFENSE PROGRAM COVERAGE

The Medical Society of New Jersey Endorsed Peer Review Organization Legal Defense Program has been expanded to provide legal defense before certified quality review organizations at no additional cost to the physician. Now, virtually every physician will benefit from this program. The program is provided by the law firm of Kern Augustine Conroy & Isele. For a $190 annual fee, the firm provides legal representation whenever the peer review organization (PRO) or any other certified quality review organization (QRO), acting by state mandate, issues an initial determination questioning the quality or necessity of services rendered. The program provides full representation through all phases of the administrative process, through review by the inspector general of the United States (DHHS).

The Medical Society continues to review and monitor the activities of the PRO. Based upon that review, the Society is convinced that every practicing physician is in substantial jeopardy when faced with a PRO or QRO review. No physician should engage in any dialogue with the PRO without the benefit of competent legal counsel. The PRO Legal Defense Program is the most effective and least costly way to obtain that protection. For more information, contact Kern Augustine Conroy & Isele at 201/984-0101.

COLLECTION INFORMATION SEMINAR

A seminar entitled, "Inside Information on Collection," sponsored by the New Jersey Society of Medical Assistants, will feature Dick Saari, BBA-Marketing, vice-president SaVit Collection Agency, *Editor-Collection News.* The program will be held on Thursday, April 12, 1990, at MSNJ headquarters, from 9:30 A.M.-3:30 P.M. with lunch included. The deadline for reservations is March 30, 1990. For information, contact Linda Wells, CMA, 609/779-1397 or Jamie Brodeur, CMA, 609/893-0741.

MATERNITY OUTREACH PROGRAM

Maternity Outreach and Managed Services Program (MOMS) works to reduce the incidence of birth complications, infant mortality, and low birthweight in New Jersey. Hospitals that provide Healthstart services are eligible to offer MOMS services. Like Healthstart, the MOMS program offers case-management services, social/psychological assessment, nutritional assessment and health education, home visits, and referral to other healthcare providers. Other services would be tailored to the specific needs of the patient. Unlike Healthstart, the MOMS program is available to any interested, pregnant woman in New Jersey and will be partially funded through the Uncompensated Care Trust Fund. Healthstart is available only to Medicaid eligible pregnant women and is completely funded by Medicaid.

MOMS services will be offered to women with incomes under 150 percent of the poverty level at no charge. Hospitals providing MOMS services to women below the poverty level can write off the charges to charity care. Women with higher incomes will be charged a sliding fee. The fee amount not charged to the patient should be written off to charity care. Women with incomes in excess of 250 percent of the poverty guideline will not be eligible for a discounted fee.

The Department of Health has recommended a $351 rate per case for hospital provision of MOMS comprehensive prenatal health support services for the 1990 rate year. The $351 rate will be updated by the economic factor for subsequent rate years. The Department of Health expects savings from the MOMS program primarily through reduced costs of newborn care associated with preterm and low birthweight babies, and from a reduction in infant rehospitalizations in the first year of life.

BLUE CROSS RATE INCREASE

The State Department of Insurance granted Blue Cross a rate increase of 24.6 percent for individual subscribers. The increase does not affect group subscribers, including employees covered through their employer's health plans. The rate hikes were granted despite the opposition of public interest groups such as the American Association of Retired Persons, the New Jersey Public Health Association, the National Organization for Women, ACLU, and NAACP. The groups oppose the increase because they believe many individual subscribers, particularly the elderly and minorities, would not be able to afford higher fees.

Blue Cross described the increase as resulting from changes in Medicare and in the Uncompensated Care Trust Fund that will saddle Blue Cross with about 24 percent higher costs in 1990 than in 1989. The rate hike follows an average increase in individual subscriber rates of 22.2 percent in 1989.

CUTS REQUIRED IN MEDI-GAP PREMIUMS

Former Commissioner of Insurance, Kenneth Merin, ordered two insurance companies to lower the rates on Medicare supplemental insurance policies for approximately 8,000 policyholders. Merin indicated that premiums on the Medi-Gap policies of the American Integrity Insurance Company and United American Insurance Company exceeded the 35 percent profit margin permitted by the Department. American Integrity's monthly premiums are to be reduced from $63.00 to $47.25 and United American's from $61 to $55.

CONFIDENTIAL AIDS REPORTING

The State Assembly and Senate have passed a bill requiring the names of individuals with AIDS or human immunodeficiency virus (HIV) to be reported to the State Department of Health on a confidential basis. The bill also makes confidential the records of individuals with AIDS or HIV, subjecting persons who unlawfully disclose information to a civil lawsuit. Information could be disclosed on a confidential basis for the purposes of medical treatment, research, education, or to the Department of Health pursuant to state or federal laws. This legislation goes beyond existing requirements of reporting AIDS cases by requiring the reporting of individuals diagnosed with the HIV infection and permitting the Department of Health to establish six test centers throughout the state to test patients for HIV.

CLAIM PAYMENT FLOOR LIFTED

An interesting development that came out of the final 1990 budget agreement was the failure of the House and Senate Conference Committee to include a provision calling for the continuation of a Medicare claim payment floor. The House version of the budget called for an increase in the minimum time Medicare intermediaries and carriers could process claims from 14 days to 16 days while the Senate version called for a 15-day floor. In the meantime, HCFA issued a notice in the December 11, 1989, *Federal Register* calling for an extension of the 14-day floor, but waiving the requirement for the remainder of 1990. HCFA has instructed Medicare fiscal intermediaries and carriers to process and pay all claims through September 30, 1990, as soon as possible without regard to the 14-day floor. According to the December 11 notice, the repeal of the

ATTENDANCE AT MEETINGS OF THE MSNJ BOARD OF TRUSTEES
County and Specialty Societies, Academy of Medicine of New Jersey, MSNJ Auxiliary, and AMA Delegation

June 1989—December 1989

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December 17 .... Terry A. Johnston, MD, President

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October 15 .... Churchill L. Blakey, MD
November 19 ... Churchill L. Blakey, MD
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December 17 .... Churchill L. Blakey, MD
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November 19 ... Russ C. Camangian, MD, President
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Frank J. Primich, MD
December 17 .... Charles L. Cunniff, MD

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September 17 ... Michael H. Bernstein, MD, President
October 15 .... Michael H. Bernstein, MD, President
November 19 ... Michael H. Bernstein, MD, President
December 17 .... Michael H. Bernstein, MD, President

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October 15 .... Frank L. Redo, MD, President

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September 17 ... John H. Lifland, MD

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November 19 ... Bartholomew R. D'Ascoli, MD, President
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Irene Rosenthal, Executive Director
July 16 .... A. Ralph Kristeller, MD
Irene Rosenthal, Executive Director
September 17 ... A. Ralph Kristeller, MD
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Frank R. Romano, Sr, MD
Irene Rosenthal, Executive Director
October 15 .... A. Ralph Kristeller, MD
Frank R. Romano, Sr, MD
Irene Rosenthal, Executive Director
November 19 ... A. Ralph Kristeller, MD
Frank R. Romano, Sr, MD
Irene Rosenthal, Executive Director
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June 4 .... Robert C. Emery, MD, President

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October 15 .... Robert C. Emery, MD, President
December 17 .... Robert C. Emery, MD, President
James H. Spillane, MD

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June 4 .... Stanley Bresticker, MD
September 17 ... Stanley Bresticker, MD
December 17 .... Stanley Bresticker, MD

New Jersey Association of Electromyography and Electrodiagnosis
October 15 .... Michael Sutula, DO, President
December 17 .... Kutumba S. Pitta, MD, Vice-President

New Jersey Chapter, American College of Emergency Physicians
June 4 .... Rudolf E. Schwaeble, MD
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September 17 ... Rudolf E. Schwaeble, MD
October 15 .... Rudolf E. Schwaeble, MD
November 19 ... Rudolf E. Schwaeble, MD
December 17 .... Rudolf E. Schwaeble, MD

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June 4 .... Sylvia H. Anthony, MD, President-Elect

New Jersey Society of Internal Medicine
September 17 ... Frank J. Malta, MD
October 15 .... Frank J. Malta, MD
November 19 ... Frank J. Malta, MD
Barry R. Zitomer, MD, President
December 17 .... Frank J. Malta, MD

New Jersey Association of Medical Specialty Societies
June 4 .... Stanley Bresticker, MD
September 17 ... Stanley Bresticker, MD
December 17 .... Stanley Bresticker, MD

New Jersey Medical Women's Association
December 17 .... Sandra Samuels, MD, President-Elect

New Jersey Obstetrical and Gynecological Society
November 19 ... John D. Franzoni, MD
December 17 .... John D. Franzoni, MD

Oncology Society of New Jersey
October 15 .... Alan J. Lippman, MD, President

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October 15 .... Saul M. Tischler, MD, President
November 19 ... Saul M. Tischler, MD, President

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September 17 ... Frank Campo, MD

New Jersey Psychiatric Association
November 19 ... Thomas R. Houseknecht, MD
December 17 .... Thomas R. Houseknecht, MD

American College of Surgeons, New Jersey Chapter
September 17 ... Ames L. Filippone, Jr, MD
November 19 ... Ames L. Filippone, Jr, MD

New Jersey Society of Thoracic Surgeons
July 16 .... Javier Fernandez, MD, Vice-President
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October 15 .... Javier Fernandez, MD, Vice-President
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Charles J. Heitzmann, Executive Director
July 16 .... Sherman Garrison, MD
September 17 ... Ronnie Davidson, EdD, Associate Director
October 15 .... Ronnie Davidson, EdD, Associate Director
Charles J. Heitzmann, Executive Director
November 19 ... Sherman Garrison, MD
Charles J. Heitzmann, Executive Director
December 17 .... Ronnie Davidson, EdD, Associate Director
Sherman Garrison, MD

Medical Society of New Jersey Auxiliary
June 4 .... Dorothy Espinola, Warren County Medical Auxiliary
September 17 ... Dorothy A. Camangian, President, Hudson County Medical Society Auxiliary
Jane Lorber, President-Elect
October 15 .... Sevim Omay, President
November 19 ... Dorothy A. Camangian, President, Hudson County Medical Society Auxiliary
Vincenza Jasper, Corresponding Secretary, Passaic County Medical Society Auxiliary
December 17 .... Vincenza Jasper, Corresponding Secretary, Passaic County Medical Society Auxiliary
Sevim Omay, President

AMA Delegation Attendance

AMA Delegates

June 4 .... Ralph J. Fioretti, MD
Palma E. Formica, MD
Karl T. Franzoni, MD
John S. Madara, MD
Henry J. Mineur, MD
Myles C. Morrison, Jr, MD
Edward A. Schauer, MD
Frank Y. Watson, MD

July 16 .... William J. D'Elia, MD
Palma E. Formica, MD
Karl T. Franzoni, MD
John S. Madara, MD
Henry J. Mineur, MD
Frank Y. Watson, MD

September 17 ... Ralph J. Fioretti, MD
Palma E. Formica, MD
Karl T. Franzoni, MD
John S. Madara, MD
Henry J. Mineur, MD
Myles C. Morrison, Jr, MD
Frank Y. Watson, MD

October 15 .... Palma E. Formica, MD
Karl T. Franzoni, MD
John S. Madara, MD
Henry J. Mineur, MD
Myles C. Morrison, Jr, MD
Edward A. Schauer, MD
Frank Y. Watson, MD

November 19 ... William J. D'Elia, MD
Frederick W. Durham, MD

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December 17 .... William J. D'Elia, MD
Frederick W. Durham, MD
Ralph J. Fioretti, MD
Palma E. Formica, MD
Henry J. Mineur, MD
Edward A. Schauer, MD
Frank Y. Watson, MD

AMA Alternate Delegates

June 4 .... Harry M. Carnes, MD
Michael M. Heeg, MD
Paul J. Hirsch, MD
Joseph N. Micale, MD
William E. Ryan, MD
Robert H. Stackpole, MD
Robert J. Weierman, MD

July 16 .... Harry M. Carnes, MD
Paul J. Hirsch, MD
Donald J. Holtzman, MD
Irving P. Ratner, MD
Carl Restivo, Jr, MD
Joseph A. Riggs, MD
William E. Ryan, MD
Robert H. Stackpole, MD
Robert J. Weierman, MD

September 17 ... Michael M. Heeg, MD
Paul J. Hirsch. MD
Joseph N. Micale, MD
Irving P. Ratner, MD
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Joseph A. Riggs, MD
William E. Ryan, MD
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December 17 .... Harry M. Carnes, MD
Michael M. Heeg, MD
Paul J. Hirsch, MD
Joseph N. Micale, MD
Irving P. Ratner, MD
Carl Restivo, Jr, MD
Joseph A. Riggs, MD
William E. Ryan, MD
Robert H. Stackpole, MD
Robert J. Weierman, MD

Catastrophic Coverage Act has resulted in additional funds being available for the payment of claims.

MSNJ DELEGATES TO THE AMA

Karl T. Franzoni, MD, *Chairman*
Joseph A. Riggs, MD, *Vice-Chairman*
Frederick W. Durham, MD
Ralph J. Fioretti, MD
Palma E. Formica, MD
John S. Madara, MD
Henry J. Mineur, MD
Edward A. Schauer, MD
Robert H. Stackpole, MD
Frank Y. Watson, MD

OPPORTUNITY FOR HEALTH REFORM

The impact of drug abuse and AIDS on the nation's health care system may create the opportunity needed by health reform advocates to achieve "fundamental and comprehensive" health care reform according to Senator Edward Kennedy (D-MA), chairman of the Senate Human Resources Committee. Kennedy plans to push for mandatory employer-paid coverage for the uninsured during the next session of Congress. While acknowledging that he faces strong opposition, Kennedy believes that with the support of Senate leadership, he expects a vote on some aspects of his plan.

HCFA NOMINEE

President Bush's nominee for HCFA administrator, Gail Wilensky, has joined HCFA, despite not receiving Senate confirmation. Wilensky will join HCFA on a contract basis. Items on Wilensky's priority list include implementation of Medicare physician payment reform and serving as vice-chairman on the HHS Task Force on the Uninsured.

VICTORY OVER ETs

The new Medicare payment reforms will be based on the AMA-supported resource-based relative value scale (RBRVS). House-Senate conferees approved the RBRVS as the basis for a new physician fee schedule. But they rejected ETs, the rigid spending caps that would have limited the amount your reimbursement could rise to a preset target.

NJMS FELLOWSHIPS

New Jersey Medical School (NJMS) has a unique fellowship program that allows its students to spend the summer between first and second year carrying out basic or clinical research in a selected field. This is one of the largest programs of its kind in the country. The research usually is done at NJMS under the guidance of a faculty member. However, the student can arrange to work at other institutions provided a sponsor is found. The stipend is $1,000 for the eight-week program. Dr. Erich Hirschberg heads the program at NJMS where a majority of his work in this area involves raising funds from various sources. The largest benefactor is the Foundation of the University of Medicine and Dentistry of New Jersey. Ample support also is provided by the Medical School Alumni Association with other contributions coming from diverse sources including federal grants and pharmaceutical companies.

The option to study at outside institutions as well as other aspects of the program have been threatened. It has been proposed that fewer students should be selected for a larger stipend and that those students should work for NJMS faculty only. But the fellowship should be viewed as an augmented volunteer program rather than summer employment with the purpose of making money. Last year, 40 percent of the first-year class participated in the program. This is ample proof that the current stipend is sufficient. Furthermore, students who are willing to arrange a fellowship at other hospitals should be rewarded for their initiative. The cost is no greater for these students while the benefits are significant; to the student, classmates, and NJMS. The class benefits by news about research and clinical opportunities at other institutions while the medical school benefits by widening its reputation. ☐ Michael A. Horgan and Eugene Rossitch, Jr, MD

NEW MAMMOGRAPHY REGULATIONS

New regulations should be redrafted to get rid of an absurd requirement that prevents many qualified physicians from doing Medicare screening mammograms, the AMA told the Department of Health and Human Services (HHS) in a recent letter. MDs board certified before January 1, 1990, would never be able to read a mammogram if they had not before that date, under the new federal laws. "We do not believe that this was the intent of the legislation," said James H. Sammons, MD, AMA executive vice-president. These regulations should be rewritten to equalize qualification standards regardless of board certification date, the AMA asserted.

GROUP-TERM LIFE INSURANCE PLANS

IRS Notice 89-110 has postponed the effective date of regulations concerning employer provided group-term life insurance on the life of a spouse or dependent of an employee. Previously, the regulations issued in July 1989 called for gross income inclusion on amounts paid for insurance coverage for the spouse and/or dependent of the employee.

The notice also provides that employer-provided group term life insurance shall be deemed a de minimis fringe benefit, if the insurance coverage for the spouse or dependent is $2,000 or less. Although this does provide a safe harbor for employers, the regulations providing for income inclusion could become effective once the Internal Revenue Service announces the effective date for implementation of the rule.

ACTION ON PROFESSIONAL LIABILITY Professional liability continues to be a major concern. The AMA and over 30 national medical specialty societies have formed the AMA/Specialty Society Medical Liability Project (AMA/SSMLP). The AMA/SSMLP has developed a proposal for an alternative to the jury system called the "Model Medical Liability and Patient Protection Act."

RETIREMENT THROUGH SUCCESSFUL MONEY MANAGEMENT A seminar, sponsored by the Medical Society and AMA Investment Advisers, Inc., "Gearing Up For Your Retirement Through Successful Money Management," will be held at Society headquarters on April 4 and April 5. The program, which will be given in its entirety on both days, runs from 9:30 A.M. to 4:30 P.M. Lunch will be provided as well as refreshments during the morning and afternoon breaks. You will learn how to set your personal financial goals, plan for your retirement, lower your taxes, and develop a financial plan. In addition, the seminar will cover a variety of investment alternatives such as stocks, bonds, mutual funds, real estate and much more.

You can sign up for the seminar by calling the Department of Medical and Insurance Affairs at the Medical Society of New Jersey, 609/896-1766. Registration deadline is March 28, 1990. Please sign up early as space is limited to 100 people per seminar; members of MSNJ and spouses are invited to attend.

SOCIETY OF SURGEONS PRESIDENT A member of our Morris County component, Hormoz M. Minoui, MD, was elected president of the Society of Surgeons of New Jersey for 1990. The Society of the Surgeons of New Jersey was established in 1912, and the statewide society admits only senior surgeons with established credentials to its membership. Dr. Minoui, who specializes in general and thoracic surgery, has been on staff at Dover General Hospital Center since 1963.

AMA PLAN FOR UNINSURED Too many people slip through the cracks in our nation's health insurance system. To correct this problem, the AMA developed a multi-pronged plan that would address the health care needs of all the uninsured and underinsured. The plan includes a number of state and federal legislative proposals involving the public and private sector:

- A phased-in requirement that employers provide coverage for all full-time employees.
- Tax credits for new and small businesses that cover employees.
- An expanded Medicaid program to cover all those living below the poverty level.
- State risk pools to cover high-risk medically uninsurable persons.
- Full tax deductions for health insurance contributions of self-employed persons.
- Formation of more multiple employer trusts that allow small employers to combine risk.
- State indigent care funds.

The AMA has been regularly testifying before Congress to push for these proposals. Efforts will not stop until the problem of the uninsured is solved, without interference in the practice of medicine.

FINI "When you betray someone, you also betray yourself."

June 11-15, 1990
Update Your Medicine 1990.

Cornell University Medical College and Association of Practicing Physicians of the New York Hospital. 36½ hour Category I credit (42 if optional workshops are aken). One week review of all subspecialties of internal medicine. Nine major two-hour symposia, six hour review lectures, and Medical Grand Rounds. Four workshops will be given for practical problems and management techniques. Optional workshop sessions on Breast/Pelvic and Male Genitorectal examinations. Held at the New York Hospital-Cornell, 1300 York Avenue at 69th Street, New York, **Information: Office of CME, 212-746-4752,** or write Room D-115. Dr. Lila Wallis is Course Director.

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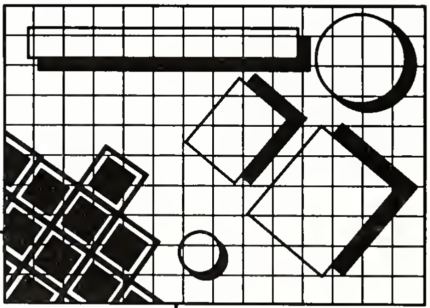


VAX deco

INTERIOR DESIGNS, INC.
COMMERCIAL / RESIDENTIAL (201) 821-7850

LEVOXINE® *(Levothyroxine Sodium Tablets, USP)* For oral administratio

The following is a brief summary. Before prescribing, please consult package insert.

INDICATIONS AND USAGE:

LEVOXINE (L-thyroxine) tablets are indicated as replacement or supplemental therap for diminished or absent thyroid function, resulting from functional deficiency, primar atrophy, from partial or complete absence of the gland or from the effects of surger radiation or antithyroid agents. Therapy must be maintained continuously to control th symptoms of hypothyroidism.

CONTRAINDICATIONS:

L-thyroxine therapy is contraindicated in thyrotoxicosis, acute myocardial infarctio and uncorrected adrenal insufficiency.

WARNINGS:

Drugs with thyroid hormone activity, alone or together with other therapeutic agents, have been used for the treatment of obesity. In euthyroid patients, doses within the range of daily hormonal requirements are ineffective for weight reduction. Larger doses may produce serious or even life-threatening manifestations of toxicity, particularly when given in association with sympathomimetic amines such as those used for anorectic effects.

PRECAUTIONS:

Caution must be exercised in the administration of this drug to patients with cardiova cular disease. Development of chest pains or other aggravation of the cardiovascular di ease requires a reduction of dosage.

Patients on thyroid preparations and parents of children on thyroid therapy should b informed that replacement therapy is to be taken essentially for life. They should in mediately report during the course of therapy any signs or symptoms of thyroid hormon toxicity, e.g., chest pains, increased pulse rate, palpitations, excessive sweating, he intolerance, nervousness, or any other unusual event. In case of concomitant diabete mellitus, the daily dosage of antidiabetic medication may need readjustment. In case concomitant oral anticoagulant therapy, the prothrombin time should be measured fr quently to determine if the dosage of oral anticoagulants is to be readjusted.

Partial loss of hair may be experienced by children in the first few months of thyroi therapy, but this is usually a transient phenomenon and later recovery is usually th rule.

Drug Interactions — In patients with diabetes mellitus, addition of thyroid hormon therapy may cause an increase in the required dosage of insulin or oral hypoglycemi agents.

Patients stabilized on oral anticoagulants who are found to require thyroid replac ment therapy should be watched very closely when therapy is started.

Cholestyramine binds both T_4 and T_3 in the intestine, thus impairing absorption these thyroid hormones. Four to five hours should elapse between administration cholestyramine and thyroid hormones.

Estrogens tend to increase serum thyroxine-binding globulin (TBg). Patients without functioning thyroid gland who are on thyroid replacement therapy may need to increas their thyroid dose if estrogens or estrogen-containing oral contraceptives are given.

Drug/Laboratory Test Interactions — The following drugs or moieties are known to inte fere with laboratory tests performed on patients taking thyroid hormone: androgens, co ticosteroids, estrogens, oral contraceptives containing estrogens, iodine-containin preparations, and the numerous preparations containing salicylates.

Carcinogenesis, Mutagenesis, And Impairment of Fertility — A reported apparent a sociation between prolonged thyroid therapy and breast cancer has not been confirme No confirmatory long-term studies in animais have been performed to evaluate ca cinogenic potential, mutagenicity, or impairment of fertility in either males or females

Pregnancy-Category A — The clinical experience to date does not indicate any advers effect on fetuses when thyroid hormones are administered to pregnant women.

Nursing Mothers — Minimal amounts of thyroid hormones are excreted in human mil Thyroid is not associated with serious adverse reactions and does not have a know tumorigenic potential. However, caution should be exercised when thyroid is admini tered to a nursing woman.

Pediatric Use — The incidence of congenital hypothyroidism is relatively high. Routin determinations of serum (T_4) and/or TSH is strongly advised in neonates in view of th deleterious effects of thyroid deficiency on growth and development.

ADVERSE REACTIONS:

Adverse reactions are due to overdosage and are those of induced hyperthyroidism.

OVERDOSAGE — Excessive dosage of thyroid medication may result in symptoms hyperthyroidism, which may not appear for one to three weeks after the dosage regime is begun. The most common signs and symptoms of overdosage are weight loss, palpit tion, nervousness, diarrhea or abdominal cramps, sweating, tachycardia, cardiac arrh thmias, angina pectoris, tremors, headache, insomnia, intolerance to heat and fever. symptoms of overdosage appear, discontinue medication for several days and reinstitut treatment at a lower dosage level.

Complications as a result of the induced hypermetabolic state may include cardia failure and death due to arrhythmia or failure.

Dosage should be reduced or therapy temporarily discontinued if signs and symptom of overdosage appear.

Treatment of acute massive thyroid hormone overdosage is aimed at reducing ga trointestinal absorption of the drugs and counteracting central and peripheral effect mainly those of increased sympathetic activity. Measures to control fever, hypoglycemia, fluid loss should be instituted if needed.

DOSAGE FORMS AVAILABLE:

LEVOXINE (L-thyroxine) tablets are supplied as oval, color coded, potency marke tablets in 11 strengths: 12½ mcg (0.0125 mg) - maroon, 25 mcg (0.025 mg) - orang 50 mcg (0.05 mg) - white, 75 mcg (0.075 mg) - purple, 100 mcg (0.1 mg) -yellow, 112 mc (0.112 mg) - rose, 125 mcg (0.125 mg) - brown, 150 mcg (0.15 mg) - blue, 175 mc (0.175 mg) - turquoise, 200 mcg (0.2 mg) - pink and 300 mcg (0.3 mg) - green, in bottles 100 and 1000, and unit dose in cartons of 100 (10 strips of 10 tablets), 200 mcg an 500 mcg injectable (see injectable package insert).

PROFESSIONAL LIABILITY

NO AWARD FOR AIDS-PHOBIA

A hospital employee, bitten by an unrestrained prisoner, was entitled to $35,000 for pain and suffering, a New York trial court ruled. The employee was bitten on the right forearm while attempting to help subdue the prisoner. The court awarded the employee $35,000 for pain and suffering but refused to award him compensation for the AIDS-phobia he allegedly suffered. The court said police officers were negligent in not being in the same room as the unrestrained prisoner. The employee was tested for AIDS three times with negative results each time. There was no evidence that the prisoner had AIDS, the court said. (Reprinted with permission from *The Citation,* American Medical Association, Volume 60, November 1, 1989.)

NEGLIGENCE OF A NON-HMO CONSULTING PHYSICIAN

An HMO was vicariously liable for the negligence of a cardiologist brought in as a consultant by an HMO physician, a federal appellate court for the District of Columbia ruled.

The patient, a 48-year-old man, was a subscriber of the HMO through his employer. In March 1983, the patient was treated at the HMO for abdominal pain. On May 6, 1983, the patient spoke with an HMO nurse about continual stomach pain. On May 12, the patient called the HMO about a 45-minute episode of chest pain radiating into his left shoulder. The patient was sent to a hospital emergency room; an EKG was done. The EKG was interpreted as having nonspecific S-T wave changes. An HMO physician admitted the patient to the hospital's coronary care unit and brought in a non-HMO cardiologist to examine the patient.

After reviewing the available information, the cardiologist determined that the patient probably did not have a heart attack. The cardiologist scheduled tests and found the patient's MUGA test results to be normal but the patient's stress EKG results were abnormal. Nevertheless, the cardiologist concluded it was unlikely the patient had coronary heart disease and did not order more tests or restrict the patient's activities.

In the four nights following the MUGA test, the patient complained to an HMO physician of profuse night sweats. After reviewing the patient's medical record, which did not yet include the results of the abnormal stress EKG, an HMO physician told the patient that the night sweats were not cardiac related.

On June 19, 1983, the patient began to sweat heavily and became exhausted after mowing his lawn and doing some housework. The next day he began to vomit and was very weak and tired. The patient's wife called the HMO nurse; the nurse said he would have to sweat out his condition. When the wife returned, she found the patient gasping for air. The patient stopped breathing before the rescue squad arrived and he died in the ambulance on the way to the hospital.

The patient's wife, as personal representative of the patient's estate, sued under the District of Columbia's survival statute and claimed that the HMO physician had negligently failed to diagnose and treat the patient's latent coronary artery disease.

The jury returned an $825,000 lump sum verdict in favor of the wife, as the personal representative of the patient's estate. The HMO appealed on several issues. First, the HMO contended that it had not breached its contractual duty to provide adequate health care and was not vicariously liable for the negligence of the consulting cardiologist because he is an independent contractor. The federal appellate court disposed of the HMO's first argument by stating that "the record is replete with . . . evidence" that the HMO breached its contractual duty.

Secondly, the appellate court held that under the law of the District of Columbia, the HMO was responsible for the negligence of the cardiologist, despite his status as an independent contractor. The court pointed out that the cardiologist was brought in on the patient's case by an HMO physician. Therefore, the HMO selected him. Further, the HMO had some ability to control the cardiologist in that he reported to the patient's primary physician, an HMO physician. Finally, the cardiologist's actions were part of the regular business of the HMO.

The federal appellate court explained that while the courts in the District of Columbia had not addressed the issue of when an independent contractor is an apparent or ostensible agent, there is a decision by the federal district court for the District of Columbia holding that an employer is not responsible for the acts of an independent contractor when the independent contractor is acting on his own initiative and without direction or control of the employer. The appellate court opined that in the case at issue, the cardiologist acted neither on his own initiative nor independently of the HMO physician. Actually, the cardiologist "only made recommendation to the [HMO] doctor," the court noted.

The appellate court also referred to an opinion from Maryland's highest court that held a hospital was responsible for its emergency room physicians even though they were independent contractors because "patients who came to the emergency room reasonably expected—and were not disabused of the notion—that the doctors in the emergency room were hospital employees." By analogy, according to the court, the cardiologist was brought in by the HMO to examine the patient who had every reason to believe the cardiologist was the HMO's agent.

The HMO also raised questions on appeal concerning the calculation of the amount of damages. The court found that there was no need for an expert to testify as to the calculation of the patient's lost future wages because there was sufficient testimony by his employer regarding his employment history. The court held that expert testimony was necessary to guide the jury on questions of inflation and discounting to present value. The court held that the HMO was entitled to a jury instruction that any award would not be subject to taxes, because this instruction would help the jury in calculating the patient's lost earnings.

Based on these findings, the appellate court reversed in part and remanded the case for a new trial only on the amount of damages.

COMMENT It is likely that more personal injury suits brought against HMO physicians also will name the HMO under the theory of respondeat superior, even if the physicians are independent contractors. It is not at all unusual for a hospital to be found liable for the negligence of physicians on its medical staff for various reasons—ostensible agency, negligent credentialing, etc. The same theories apply to HMOs and their relationships with physicians who are independent contractors. (Terrie A. Rymer, JD, staff attorney, Health Law Division, AMA, reprinted with permission from *The Citation,* AMA, Vol. 60, November 1, 1989.)

PRESIDENT'S PAGE

YOUR PROFESSIONAL LIABILITY INSURANCE

One of the most important, and one of the finest, actions of the Medical Society of New Jersey on your behalf was the formation of an insurance company to provide professional liability coverage for the physicians of New Jersey. This came at the height of the "malpractice crisis" and at a time when professional liability coverage might not have otherwise been available in New Jersey.

At that time, the Medical Society of New Jersey founded the Medical Inter-Insurance Exchange of New Jersey (MIIENJ), a reciprocal company owned by its insureds. This was to be an insurance company that would serve its insured physicians, in a manner otherwise unavailable to our members. It has fulfilled this goal admirably.

Because New Jersey law requires that a reciprocal insurance company be managed by an "attorney-in-fact," the Medical Society of New Jersey also formed the New Jersey State Medical Underwriters, Inc. (NJSMU) to "service" and provide active management for the Medical Inter-Insurance Exchange of New Jersey. NJSMU is wholly owned by the Medical Society of New Jersey and its membership. The Board of Trustees of the Medical Society of New Jersey has the responsibility to ensure that the board of directors and management of the New Jersey State Medical Underwriters Inc. continues to be responsible to, and responsive to, the Medical Society of New Jersey and its membership. We take this obligation very seriously.

In recognition of this responsibility, your Board of Trustees recently has enlarged the board of directors of NJSMU, to broaden representation. New members are Drs. Harry Carnes, Paul Hirsch, Fred Palace, Joseph Riggs, and Herman Robinson.

The Medical Inter-Insurance Exchange of New Jersey, and the New Jersey State Medical Underwriters, Inc. are very important to you, and very important to your officers and trustees. We expect through enhanced management and participation to continue to meet all your professional liability insurance needs.

HONORS TO DR. FIORETTI & DR. FARES

Two members of the leadership of the Medical Society of New Jersey recently have been selected to receive prestigious awards.

Dr. Ralph J. Fioretti, of Bergen County, past-president of this Society and a member of our AMA Delegation, was selected to be the recipient of the New Jersey Doctor of the Year Award, of the New Jersey Academy of Family Practice. Dr. Fioretti has been one of our most beloved and respected leaders.

Dr. Louis G. Fares, of Mercer County, MSNJ judicial councilor from the Third District, has been honored by the Mercer Unit of the American Cancer Society, at the Annual Joyce McDade Memorial Ball, as "an outstanding citizen . . . a fine physician . . . and a dedicated volunteer in the fight to control cancer."

We are very proud of Dr. Fioretti and Dr. Fares, and of the many members of the Medical Society of New Jersey who serve their profession, serve their communities, and serve the citizens of New Jersey.

CAPITALISM VERSUS SOCIALISM

On the last day of 1989, economist Milton Friedman wrote an article in *The New York Times* summarizing some recent trends. He began by noting that "socialism is a failure," wherever it has been tried, that "capitalism is a success," and that free private markets have demonstrated their effectiveness. He then goes on to state, ironically, that many people have somehow drawn the conclusion that the United States needs more socialism.

Mr. Friedman describes socialism as government ownership and control. He notes that those areas of our economy that are controlled by government are our most technologically backward areas. He states that these areas are typified by waste, fraud, and inefficiency.

Yet, he notes that despite this, one of the most persistent complaints seems to be that "government should be doing more . . . ."

In his article, Mr. Friedman does not discuss medical care; but the lesson is clear. Increased taxes and increased government participation never are the solution to a problem, and never have created an improved product or an improved service. It is the task of the Medical Society of New Jersey to continue to represent our profession, our patients, and our citizens, preventing or minimizing government incursions into medicine, and maintaining the unique quality of care in this country.

SPECIAL ISSUE

This issue of *NEW JERSEY MEDICINE* is devoted to the history of women in medicine. We are proud of the role women have played in the New Jersey medical community, and we are proud of the expanding role they will play in the future. ☐

EDITOR'S DESK

HIPPOCRATES' RIB

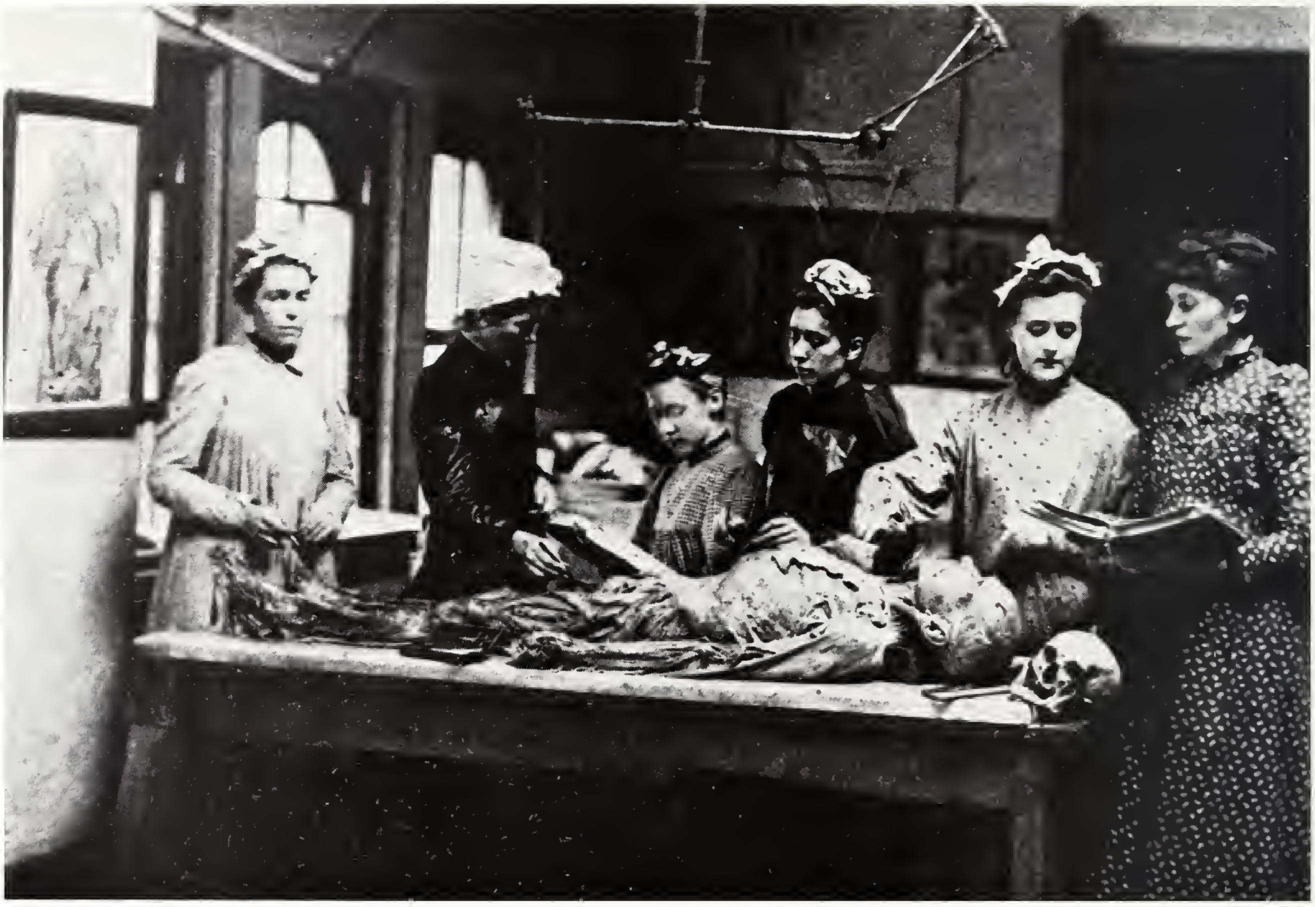
"I shall make him a helper for him." Thus, Adam's rib was used to create Eve—a woman out of a man—as a companion and partner, to be "bone of my bones" and "flesh of my flesh," and for a man and wife to become one flesh.

Through the years, women have been considered more as handmaidens, servants, or attendants, subservient or subordinate to the male, rather than as equal partners. Today's battles for equality have narrowed the gap dramatically. Nowhere is this seen more clearly than in American medicine, where women now represent about one-third of enrollments to medical school, and where women are accepted in diverse fields of practice, including all the surgical disciplines. The progress has been slow. This month's feature article dramatizes the pioneering efforts of American women physicians in the 19th and early 20th centuries, emphasizing the involvement of women with New Jersey medical societies. It is being published now to coincide with the observance of National Women's History Month, to be punctuated in New Jersey by a conference and fair at Trenton State College on March 16, 1990.

The history of women in medicine is the history of medicine itself. Women in the 5th century BC were performing mastectomies and caesarean sections. Women founded hospitals in the 4th and 5th centuries AD for the poor and needy and served patients therein, usually without fees. In medieval times, many women graduates of the school in Salerno were among the most influential physicians of the day. The doors began to close on female practitioners when the study of medicine began to rest more firmly on scientific inquiry; few women had access to formal education. It has taken much effort, attended by slow progress, in the 19th and 20th centuries to open these scholarly doors.

Elizabeth Blackwell, despite all the publicity given her, was not the first woman physician in the United States; she was the first female graduate of a recognized American medical school. (Interestingly, her namesake, another Elizabeth Blackwell, was a renowned herbalist and physician in the United Kingdom in the 18th century.) The early colonies had "doctoresses," but they faded from view in the 18th century from societal pressure and the need for medical education to be obtained abroad, an enterprise enjoyed almost exclusively by men of means. In the early 19th century, an individual could become a licensed practitioner either by apprenticeship and examination or by graduation from one of the few medical schools then extant. Among the former group were Harriet Hunt (1805-1875) and her sister, Sarah, who practiced in Boston as early as 1835 and who developed a large practice. Harriet should be remembered and applauded by all of us for her tireless efforts to obtain equal treatment for women by medical schools and by society; she was, indeed, the "first" American woman physician.

We are pleased by the strides made by women in medicine. In New Jersey, we have had women as presidents of county societies and as president and chairman of the Board of the Medical Society of New



Emma Weeks (seated with book) in the anatomy laboratory of the Woman's Medical College of Pennsylvania. Dr. Weeks was a graduate of the 1892 class, and was the first woman physician of the Burlington County Medical Society. (Archives and Special Collections on Women in Medicine, Medical College of Pennsylvania. Published with permission.)

Jersey. The American Medical Association (AMA) has a practicing female physician as an elected member of its Board of Trustees. Nevertheless, women physicians are reluctant to commit themselves to epicenic medical organizations. The American Medical Women's Association (AMWA) is a fine organization, but it can speak only for women and, like it or not, it carries little clout outside its ranks. Members of a Hibernian group or the Veterans of Foreign Wars can find participation rewarding, but they must exercise their voting privileges to ensure representation. Similarly, members of AMWA and unaffiliated women physicians would serve themselves well, as they would their colleagues and their patients, were they to emulate the New Jersey pioneers limned in Ms. Hutner's report and join county and state medical societies and the AMA. It is time for women to reflect the collegiality of today's medical schools. ☐

Woman is woman's natural ally.
Euripides (5th century B.C.)
But man is no longer the enemy.
Slobodien (1990 A.D.)

BOOK REVIEWS

DESIGNING AND BUILDING YOUR PROFESSIONAL OFFICE

Murray Schwartz, DDS. Oradell, NJ, Medical Economics Books, 1989. When one first peruses this 300-page text on physical office acquisition and/or construction, an immediate reaction is that this book presents more information than one possibly could use. However, as a physician who has been through this process several times, and as a medical educator who realizes how little curricular time is devoted to this topic in the course of undergraduate and graduate medical education, I believe this text could be invaluable to the practicing physician.

Most medical educators have little or no concern about their clinical office, given that most of them practice in locations on a hospital campus, or in large multispeciality groups administered by a faculty practice plan. On the other hand, private practitioners, who represent the bulk of medical practice in this country, generally do so in private offices they obtain and maintain with little formal guidance.

Dr. Schwartz's book is comprehensive and succinct. I found the author's advice to be accurate, well thought out, and up to the minute. Yet, he presents, in a very factual fashion, some issues that, upon reflection, are his own conclusions and may be subject to considerable debate among other professionals. However, he consistently and appropriately advises the reader to seek consultation with experts in the various applicable fields, and he gives the reader a very good sense of what one can expect from such consultations. This book is must reading for anyone anticipating constructing an office building. And, it is suggested reading for anyone who has to deal with the issue of a professional office even if it is only in rental space. ☐ Joseph A. Lieberman, III, MD

FUNDAMENTAL IMMUNOLOGY. SECOND EDITION

William E. Paul. New York, NY, Raven Press, 1989. This textbook fully fulfills the title and is a must for any serious immunologist. The text provides a background of information in immunology; it has been written by major experts in the various areas of immunology and includes a separate chapter on critical techniques including the famous FACS (fluorescent activated cell sorting) and long-term culture of immunocompetent cells that are critical for any serious immunologic laboratory. In addition, there are separate sections of the text with several chapters included in each, covering areas of mechanisms of immunity, e.g. complement, phagocytosis, cytotoxic T-lymphocytes, and natural killer cells, and cytotoxic macrophages. Several sections are devoted to the regulation of the immune response as well as lymphocyte activation, proliferation, and differentiation. One of the most well-designed chapters is on autoimmunity and autoimmune diseases, in which areas of human autoimmune diseases are described by their basic immunological pathogenesis and then compared to the most appropriate animal models which reflect similar process.

I highly recommend this book to any serious basic immunologist or clinical immunologist; it is a delightful and easy reading text and can function as an adjunct to Samter's text on *Immunologic Diseases* and Middleton's *Allergy: Principles and Practice.* ☐ Leonard Bielory, MD

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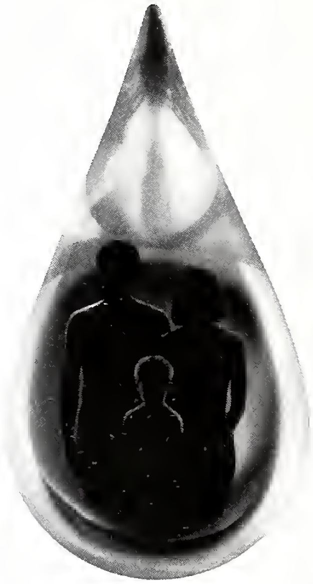

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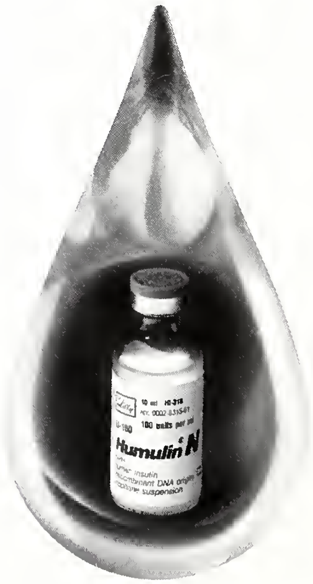

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Grace Under Pressure

The First Women To Join the County Medical Societies of New Jersey

GERALDINE R. HUTNER, MA

The women were as different as night and day. Yet, they had one common goal: to succeed as physicians. These were the women who broke the barrier to become the first women members of the New Jersey county medical societies.

Why did these women want to become physicians? In the late 1800s and early 1900s, this choice of a profession was questionable: "It may be said by some people that, even if women are competent to become good doctors, they will lose more than they gain. People will ask concerning the woman doctor, not, Is she capable? but, Is this fearfully capable person nice? Will she not upset our ideals of womanhood and the relations between the sexes? Can a woman-doctor be a womanly, lovable person?"[1]

Yet, the women who desired to be physicians were willing to deal with a social climate that was far from warm: they endured social stigma, personal hardships, and sexual discrimination in order to fulfill their dreams.

But there were voices willing to concede that women would be able to be physicians—and good ones. *The Woman's Book,* a two-volume, how-to book for women in the late 1800s, ended its section on occupations for women in medicine on a positive note: "Whether women will ever do as much or as remarkable, work in this field [medicine] as men, has but little to do with the question. The law of supply and demand may be trusted here as elsewhere, and if women doctors do not meet a real need they will die out. At present, it is certain that a definite demand for their services does exist. And as an injustice is not small because it concerns a small number, if a single woman desires to consult a doctor of her own sex, and if one other woman desires to qualify herself to be that doctor, no obstacles ought to be placed in the way. No one has the right to decide what is or is not another person's proper sphere. The proper sphere for all human beings is the largest and the highest they are able to attain to, and what this is cannot be ascertained without complete liberty of choice."[1]

MEDICAL EDUCATION FOR WOMEN

Dr. Joseph S. Longshore was a driving force in the establishment of a Philadelphia medical school for women, as his sister and sister-in-law were both serving as apprentices in his clinic. Consequently, in 1850, the Female Medical College of Pennsylvania was opened in the back of a rented house on Arch Street in Philadelphia[2] with a faculty of six physicians and 40 students.[3] After the Civil War, the school was reopened and renamed the Woman's Medical College of Pennsylvania under the directorship of Ann Preston, MD. Because medical education of women was still walking a fine line, the College "did offer a superior course, often initiating groundbreaking reforms. Operating under intense public scrutiny, professors (male and female) were careful to teach only regular therapeutics."[2] With lectures and clinical work, students also were given practical training, as the College had a dispensary and hospital, opened in 1858 and 1861, respectively. Requirements for graduation included the study of

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Ms. Hutner is executive editor of *NEW JERSEY MEDICINE*. Requests for reprints may be addressed to MSNJ, Two Princess Road, Lawrenceville, NJ 08648.

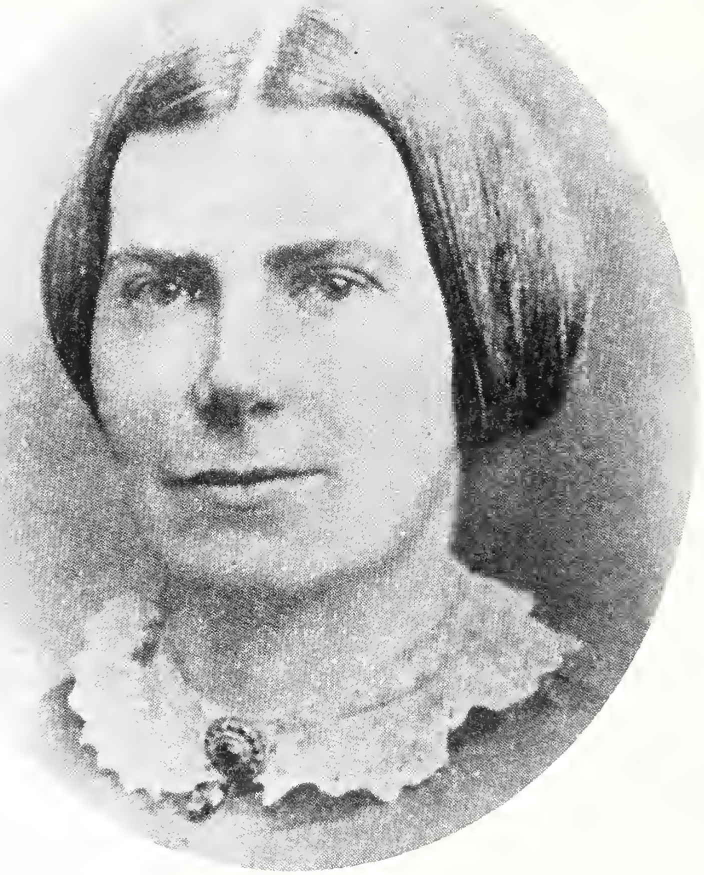

Figure 1. Elizabeth Blackwell, MD, was the first woman to receive a medical degree in the United States. (Published with permission. © Archives and Special Collections on Women in Medicine, The Medical College of Pennsylvania.)

medicine for three years, six months service in a recognized hospital, and two lecture courses on chemistry and toxicology, anatomy, materia medica and general therapeutics, physiology and hygiene, principles and practice of medicine, principles and practice of surgery, and obstetrics and disease of women and children.[2]

Applicants were to be between the ages of 20 and 35. Fees for the Medical College included a matriculation ticket for $5, professors' tickets for $105, practical anatomy for $10, and the graduation fee for $30, with the whole cost for two or more courses of lectures and graduation for $265. There was a final examination and a senior thesis to be completed before the doctor of medicine degree was awarded to the graduate. For 120 years, the College continued as a medical school for women.

The Women's Medical College of the New York Infirmary was founded by Elizabeth Blackwell and her sister Emily in 1868 because, as Elizabeth put it, "The practice of medicine by women no longer is a doubtful, but a settled thing. But there is not in the whole extent of our country a single medical school where women can obtain a good medical education."[4]

Elizabeth Blackwell was the first woman to receive a medical degree in the United States; she obtained her diploma from Geneva College of Medicine in upstate New York under unusual circumstances. After studying with Dr. Joseph Warrington of Philadelphia, Elizabeth applied for admission to Geneva, an all-male school. The Dean felt the students would not tolerate the presence of a woman and so he let them vote on Elizabeth's application. To his surprise, the student body voted to accept the request, stating "that the application of Elizabeth Blackwell to become a member of our class meets our entire approbation; and in extending our unanimous invitation we pledge ourselves that no conduct of ours shall cause her to regret her attendance at this institution."[5] Although the students did not live up to this pledge, Elizabeth persisted and on January 23, 1849, she duly received a doctor of medicine degree.

Table. ***Women members of the county societies of New Jersey.***

Name	Year Birth/Death	Medical School/Graduation	County Membership
Chard, Marie	1868-1938	Women's Medical College/ New York Infirmary—1895	Ocean 1908-1924
Clark, Alice	1903-	University of Buffalo—1933	Hunterdon 1936-1966
Clark, Emma	1866-1923	Syracuse University—1902	Morris 1906-1924
Clement, Ruth	1848-1925	Woman's Medical College of PA—1889	Gloucester 1915-1925
De Hart, Florence	1871-1906	Women's Medical College/ New York Infirmary—1893	Hudson 1899-1906
Dunlap, Mary	1853-?	Woman's Medical College of PA—1886	Cumberland 1901-1909
Galt-Simmons, Eleanor	1854-1909	Woman's Medical College of PA—1879	Union 1886-1895
Gaston, Mary	1855-1956	Woman's Medical College of PA—1888	Somerset 1891-1911
Grier, S. Mabel	1880-1969	Johns Hopkins—1905	Mercer 1908-1909
Hallowell, Rebecca	1830-1909	Woman's Medical College of PA—1878	Atlantic 1883-1891
Haines, Eleanor	1846-1924	Woman's Medical College of PA—1871	Essex 1876-1924
Hand, Anna	1849-1921	Woman's Medical College of PA—1890	Cape May 1901-1915
Marsh, Caroline	1863-1922	Woman's Medical College of PA—1890	Middlesex 1892-1894
Mackintosh, Sarah	1836-1903	Women's Medical College/ New York Infirmary—1872	Passaic 1872-1887 Monmouth 1888-1903
Presley, Sophia	1834-1909	Woman's Medical College of PA—1879	Camden 1890-1904
Sheffield, Doreen	1907-1961	Manitoba Medical School—1929	Warren 1950-1962
Smith, Ellen	1866-1920	Woman's Medical College of PA—1892	Salem 1916-1920
Stewart, Katherine	1911-	Cincinnati Medical School—1935	Sussex 1944-1950
Van Horne, Caroline	1862-1914	Woman's Medical College of PA—1894	Bergen 1899-1914
Weeks-Metzer, Emma	1870-1964	Woman's Medical College of PA—1893	Burlington 1896-1950

Dr. Blackwell realized the need for a hospital in which women physicians could practice, and so with her physician-sister Emily, she helped to raise enough funds by 1857 to establish the New York Infirmary for Women and Children in New York City (now Beekman Hospital); 11 years later, with the approval of colleagues and workers, Elizabeth and Emily Blackwell fought to have the Infirmary's charter amended to allow it "to grant and confer the title of Doctor of Medicine."[4]

In November 1868, the Women's Medical College of the New York Infirmary opened with a class of 17 students, 11 faculty members, and an 8-member Board of Examiners. The records state: "A good general education was required for admission. Before receiving their diplomas, the candidates were asked to present a certificate from a clergyman, physician, or other responsible person, testifying to their moral character. A full year's course of lectures cost $105 plus $5 for the demonstrator's fee. Graduation fee was $30 and a matriculation ticket cost $5.[4] During the first year, students studied anatomy, physiology, materia medica, and chemistry; and there was practical work in pharmacy and in the anatomy rooms. In the second year, there was additional class work in medicine, surgery, hygiene, and obstetrics. Small group bedside instruction, as well as a residency at the school's Infirmary, also were available to second-year students. During their third year, students performed practical work and were expected to make case reports for their professors. All students prepared final thesis papers for their degrees.

The school had many eminent alumnae and lasted until 1899, closing only when coeducation for medicine seemed assured.

Between 1850 and 1895, there were 19 additional medical schools for women, including Johns Hopkins, Baltimore; Syracuse University, New York; University of Michigan; and New England Female Medical College, Boston.

MEDICAL SOCIETIES

The need to join a medical society was as important in the 19th and the early 20th centuries as it is today. "It was in medical societies that physicians could meet to exchange information on medical ideas, techniques, and innovations. American medical societies were involved with medical licensing, setting professional standards, establishing fees, controlling schedules, and generally standardizing their profession. Through medical societies, physicians received case referrals and recommendations to hospital and other professional appointments. Indeed by the late 19th century, medical society membership was a virtual prerequisite for most hospital affiliations. . . . Membership in medical societies accorded its members status, economic, and professional advantages, and consciously sought to establish inside and outside groups within the profession."[2] In addition, membership in medical societies separated qualified physicians from others, and this brought women an unspoken acceptance into the profession.[2]

Physician applicants were nominated by colleagues; the executive and credentials committees voted on the application after forms were filed and letters of recommendation were completed. After physicians were elected to the county society, names would be submitted to the state society; at the annual meeting, usually held in the spring, the candidates would be placed into nomination, and if no objections were voiced, the candidates were elected into the state society.

By the 1870s, women physicians were accepted into state and county medical societies. Montgomery County Medical Society in Norristown, Pennsylvania, noted in May 1870, "Doctress Anna Lukens was elected a member,"[7] and the April 9, 1872, transactions of the State Medical Society of Kansas state, "The Board of Censors reported favorably on the credentials of Dr. Francena R. Porter" and after she signed the constitution, she became a member of the Society.[8] On October 7, 1872, six months later, Sarah F. Mackintosh, MD, became the first woman member of a New Jersey county society and in June 1873, the first member of the Medical Society of New Jersey. In 1876, S. Stevenson signed the roll call of the Illinois Medical Society, keeping her sex a secret (Sarah Hackett). Rhode Island and Michigan accepted women members in 1877, and by 1881, 17 state medical societies admitted women, including the Massachusetts Medical Society that admitted Dr. Emma L. Call in 1884. The American Medical Association admitted its first woman member in 1915.

By 1900, women physicians composed almost 5 percent of the medical profession—about 7,000 physicians.

The following pages contain biographies (Table) of the women who made history in New Jersey. Many of the details of the lives of these women are buried with them, their family, and their friends. Personal feelings and emotions most likely will remain an enigma. What made them attend medical school and become physicians we may never know. It would appear, though, that these women were feminists in their own right, challenging the mores of the times. These women were active supporters of family and the medical community, combining the traditional roles expected of them and adding a nontraditional role—as physician. Yet, these women joined their county societies and the State Society, the Medical Society of New Jersey, and paved the way for the women physicians after them. ☐

Rebecca Hallowell

Atlantic County

When the railways were completed in 1854, the communities of southern New Jersey became landmarks as famous resort areas. The sea air was found to be a "natural medicine" and the entire Atlantic County was reborn.

In 1874, physicians in Atlantic County applied to the State Society for a charter to organize a county component. The request was approved, but it was not until June 7, 1880, that Atlantic County began to function regularly.[9]

The membership elected its first president in 1881, Job B. Somers, MD, and seven members attended the first meeting of the Atlantic County Medical Society. In 1882, the County sent its first representatives to the MSNJ Annual Meeting; by this time there were 11 members (with 541 members in the State Society) and Boardman Reed, MD, was the president.

As Atlantic County grew, so did the Medical Society. By 1883, the Society boasted 17 members, and the State Society was composed of 580 members. The Society's roster for this year noted that Edward North, MD, was the president, and that **Rebecca Cooper Hallowell, MD,** was a new member.[9] The Society's annual report made no special mention of Dr. Hallowell's entry into the Society, as the first woman member of the group.

Born in 1830, Rebecca Hallowell graduated with the class of 1878 from the Woman's Medical College of Pennsylvania. Upon receiving her New Jersey license the following year, she was listed as a regular physician in Atlantic City.[9,10]

In the welcoming address for the Medical Society of New Jersey Annual Meeting in 1883, Dr. Reed noted the tremendous growth of Atlantic City, with two railroads, gas works, electric lights, an ocean pier, hotels, boarding houses, water works, garbage collection, cesspools with a sewage system in the making.[9] It was in this seaside world that Dr. Hallowell lived. The minutes and recording secretary reports make no mention of her activities, except to say she was a physician and member of the county society.

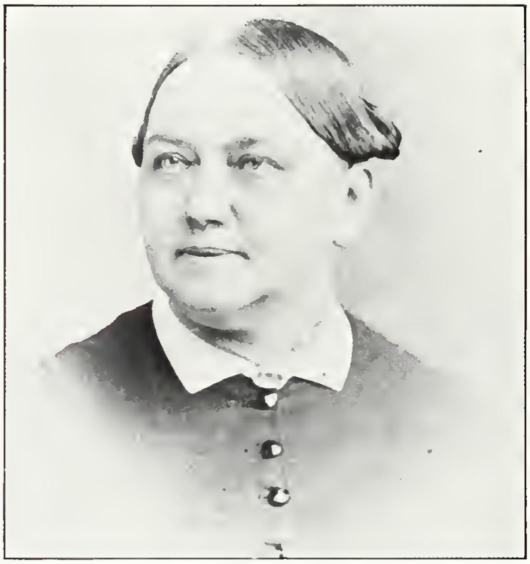

Figure 2. In 1883, Dr. Rebecca Hallowell became the first woman member of the Atlantic County Medical Society. (Published with permission. © Archives and Special Collections on Woman in Medicine, The Medical College of Pennsylvania.)

During her years in Atlantic City, Dr. Hallowell entered into a partnership with six other women: Mary A. Riddle, Julia M. French, Huldah A. Carter, Caroline E. Riddle, Julia P. Brown, and Mrs. Henry Mosebach. They formed a company on July 18, 1883, called the Chelsea Beach Company, a real estate investment company. Little is known of the success of the company, but Dr. Hallowell retained her ownership in this venture until 1888.[11]

Dr. Hallowell was listed in the membership rolls until 1891 when her name disappears from the roster. Around this time, Dr. Hallowell accepted a position as a medical missionary offered her by the Women's Matronal Indian Association; she was to help to establish a hospital at Adun Colentz, San Diego County, California. In early 1907, Dr. Hallowell retired from the active practice of medicine and returned to her home in Haddonfield. She died of heart disease at home on October 12, 1909, at the age of 79.[6] ☐

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Caroline Van Horne

Bergen County

On December 14, 1818, 11 physicians met to organize the fifth county medical society in New Jersey. Due to the frontier-like setting of this community, the group dissolved and was reorganized in 1836. This new attempt lasted just a short time, with the members gathering for only one meeting. Finally, on Sunday, February 28, 1854, the physicians in Bergen County met in Hackensack to re-establish their medical society, under the direction of president William H. Day, MD. The group remained somewhat inactive until 1858, when the members established regular meetings and scientific exchanges.[12, 13] One of their major accomplishments was the opening of Englewood Hospital on May 1, 1890. Nine years later, the Bergen County Medical Society elected its first woman member, **Caroline Helen Van Horne, MD.**[9]

The Van Horne family can be traced to immigrant ancestors, Christian Barrentsen Van Hoorne and Jannetje Jans who settled in New York City before 1657. Descendant David C. Van Horn (1830-1896) married Alice Jane Branum (1836-1909) on December 4, 1856. (Originally from Schraalenburgh, New Jersey, David moved to Wisconsin and in 1860 he returned to Closter, Bergen County.) David and Alice had two children: Byron Garret, born on October 2, 1857, in Beaver Dam, Wisconsin, and Caroline Helen, born on April 18, 1862, in Closter.[14]

The Van Horne family lived at Schraalenburgh Farm, and Carrie, as she was better known, and Byron were educated in the local public schools in Closter; later, Byron went to Hasbrooks Institute in Jersey City, and Carrie was sent to private schools in Englewood. Byron and Carrie both entered medical school in 1892: Byron at the University of Pennsylvania (graduating in 1896) and Carrie at the Woman's Medical College of Pennsylvania. Carrie graduated with the class of 1894.[14, 15] During their years of medical training, Byron worked to cover the costs of his and Carrie's medical schooling.[16] For one year, she worked at the Woman's Hospital.

Dr. Carrie Van Horne was licensed in Pennsylvania and New Jersey in 1895.[15] Carrie began her private practice of medicine with her brother at 151 Englewood Avenue, Englewood, in 1897. To distinguish between the two physicians, Carrie's brother was called Dr. Van Horne and she was known as Dr. Carrie.[16] A general physician, Dr. Carrie was awarded privileges at Englewood Hospital and served as a member of the Hospital Board. In

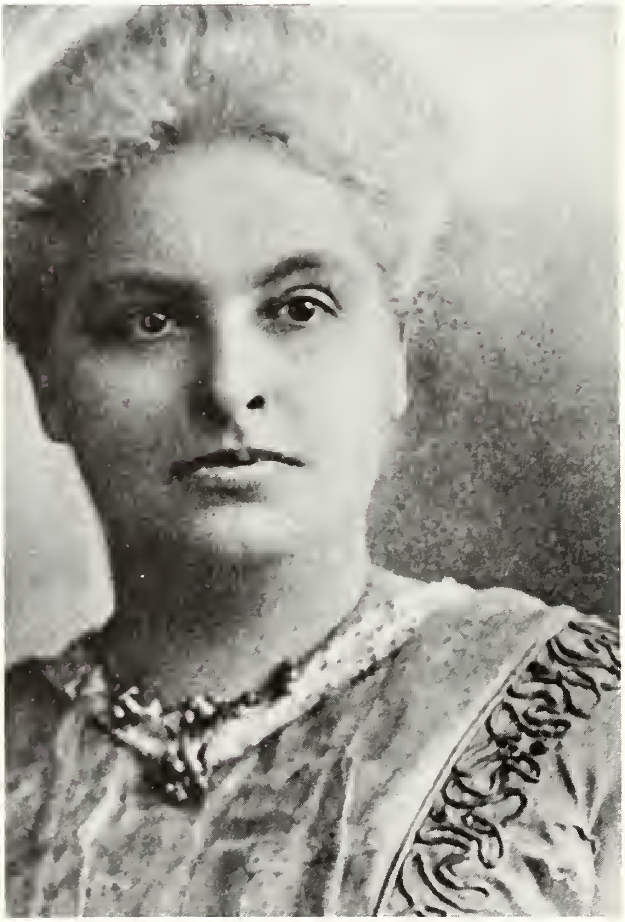

Figure 3. Dr. Caroline Van Horne and her brother, Dr. Byron Van Horne, practiced in Bergen County in the early 1900s. Dr. Carrie, as she was known, was the first woman member of that county society. (Courtesy of George Willis, Bergen County Medical Society.)

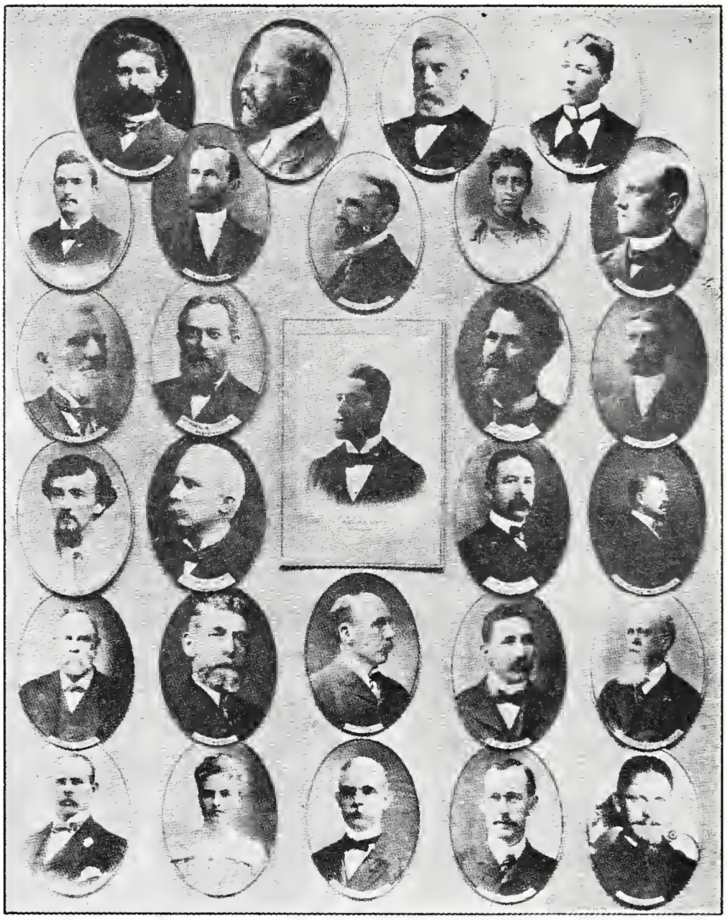

Figure 4. Physican-members of the 1902 Bergen County Medical Society.

addition, she was the medical advisor of the Englewood Day Nursery.[6, 17]

Three years after moving to Englewood, Dr. Carrie joined the Bergen County Medical Society. In 1900, there were 36 members of the County Society and 898 members of the State Society.[9] Minutes for the quarterly society meetings were reported regularly in *The Journal.* Dr. Carrie's name never was mentioned as a speaker or a delegate to the State Society meetings; the reporter did note, however, that meetings were well attended by almost all members. (Byron joined the Bergen County Medical Society in 1902, and remained a member of the Society until his death on November 20, 1922, at the age of 64.)

Group photographs were taken of the Bergen County Medical Society in 1902 and 1912; Dr. Carrie was present at both sittings. The black-and-white photographs show a light-haired, serious young physician, surrounded by male colleagues.[13] Notes from the County Society state: "Her cheerful face combined with her confident manner in the sick room contributed largely to her professional success." That she won favor and able standing is shown by the fact of her becoming a member of the Bergen County Medical Society and of the Englewood Hospital Medical Board. Her interest in matters apart from her calling proper appeared in her active connection with the Women's Club of Englewood, with the Bergen County Historical Society, and with the societies of the Presbyterian Church of Englewood.[17]

Dr. Carrie Van Horne was one of 70 members of the Bergen County Medical Society when she died at home on February 3, 1914, after a six months' illness of myocarditis; she was 51. It was reported that nearing death, medical efforts were made to revive Dr. Carrie; she came to enough to say, "Please do not try any more. It is so beautiful and peaceful."[15,16] Her will, written in July 1912 with a codicil added in January 1914, showed her family ties: she gave her home and land to her brother Byron in trust for her nephews David and Byron Jr, and property in Englewood to her niece Jean. And, she requested that her entire medical library be given to Dr. Helen Baldwin of New York City.[18]

In a tribute to Dr. Carrie's memory, the Bergen County Medical Society noted: "Her ambition received early encouragement and in due time was well satisfied and rewarded . . . Her brother Dr. Byron Van Horne, practicing in the same field and with whom she was in closest sympathy and friendship, is the nearest surviving relative." ☐

Emma Weeks

Burlington County

On May 19, 1829, five physicians were given the authorization to create the Burlington County Medical Society. They met at the Mount Holly Court House and elected Nathan W. Coles, MD, as president.[9] This small community of doctors grew at a steady pace, and in 1896, with 28 members, the Burlington County Medical Society elected its first woman member, **Emma P. Weeks, MD.**

Emma Pauline Weeks was born at home on September 13, 1870, at 10 Washington Street, Riverside. [This house was diagonally across from the house she later lived in with her family.] Her father was originally from Maine and her mother was from Maryland.[19] Emma attended Farnum School in Beverly, and St. Mary's Hall in Burlington.[10,20]

At the age of 20, Emma began her studies at the Woman's Medical College of Pennsylvania in 1890 and was graduated on May 3, 1893, along with Florence De Hart, and 47 other graduates. After finishing clinical work in Philadelphia, Emma received her licenses to practice in New Jersey and Pennsylvania, in 1893.[20] Dr. Weeks then returned to her hometown in Burlington County.[15]

In September 1893, Dr. Weeks opened a small practice on 515 Washington Street, and was the first physician in Burlington County.[15,20] In 1896, Dr. Weeks was elected into membership of the Burlington County Medical Society; she was the 29th member of the organization.[9]

At the age of 29, on February 26, 1900, Emma married William H. Metzer, a New Jersey man, and continued to practice medicine.[20] William and Emma lived at 119 Pavilion Avenue in Riverside and had one son, Freeman (1904-1984).[9]

Around 1905, Dr. Metzer moved her home and office to 119 Pavilion Avenue, where she and her husband lived until 1917; the Metzers then moved to 428 Fairview Street and Emma maintained an office at 430 Fairview Street.

Letters noted that Dr. Metzer delivered almost 3,000 babies and made house calls on bicycle and horse and buggy (that she kept in the barn at 10 Washington Street), and then in a 1910 Mitchell automobile. She also traveled by rail to Burlington and then by trolley to Mount Holly to assist Dr. Alexander H. Small, the first surgeon at Zurbrugg, in surgery at the Burlington County Hospital. When Zurbrugg Hospital opened in 1915, Dr. Weeks was one of the original ten physicians on staff.[20]

Dr. Metzer was an active participant in county affairs. And, she was the owner of one of the first telephones in Riverside, sharing the system with Mr. Warren C. Pine, the druggist (one ring), and Dr. Small (two rings). In 1901, she delivered a paper to her medical colleagues on "Labor." Dr. Weeks Metzer opened a maternity hospital at 10 Washington Street, operating it until 1930. The advertisement for the hospital stated, "The quiet, pleasant surrounding and home-like atmosphere make our modern hospital the most desirable place for the treatment of your medical, surgical, and maternity cases."[20]

On April 28, 1957, Dr. Metzer received the Medical Society of New Jersey's Golden Merit Award, given to physicians who have been in practice for 50 years or more, and she maintained memberships in MSNJ and the AMA until her death.[9]

During her lengthy career, Dr. Metzer was affiliated with Zurbrugg Hospital in Riverside, and County Memorial Hospital in Mount Holly. She was reputed to be "active, versatile, and vigorous." At the age of 75, in 1945, she retired. Emma Weeks Metzer died on April 7, 1964, at the age of 93 of lobar pneumonia.[15] ☐

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Sophia Presley

Camden County

Joseph C. Shivers's hotel in Haddonfield was the gathering place for five physicians on the morning of August 14, 1846. Under the leadership of James S. Risley, MD, the group became the Camden County Medical Society. And, in 1890, this group, numbering 55, elected its first woman member, **Sophia Presley, MD.**

Sophia Presley was born to William and Letitia Moore in Drumcrin, Ireland, in 1834; at the age of 16, she immigrated to the United States with her parents and brother and sister. Her family settled in Steubenville, Ohio, where Sophia's father was a glass packer. Sophia completed her education at the Granville (Ohio) Female Episcopal Seminary, and was a grammar schoolteacher in Dresden, Ohio, for four years; she then taught English and mathematics at Barnett Academy at Charlestown, Indiana, for three years.[2,6,21] Sophia moved to Wellsville, Ohio, and taught at a school there until 1876.[21]

In 1876, she entered the Woman's Medical College of Pennsylvania, and was 1 of the 20 graduates of the medical school in 1879 including Eleanor Galt-Simmons. Her thesis was on acquired syphilis.[2,15] After being licensed in 1881 in Pennsylvania, Dr. Presley was invited to become a member of the Surgical Clinic of the Woman's Medical College for one year, and then served as a clinic physician from 1881 to 1884.

A few years later, Dr. Presley settled in Camden and received her license to practice medicine in New Jersey. She worked for the City Dispensary and maintained a private practice "at [a] time in [Camden] when there was no regular woman physician practicing in this city—and although at this early date there was a strong prejudice in employing a female physician, yet by her earnest zeal and ability she soon had the confidence of many of our prominent families, and secured a large clientele under adverse circumstances. It has been reported that her practice extended to include the best families in the city, and she is called in consultation with the most eminent physicians in Philadelphia and other cities."[9,21]

On November 14, 1882, the Camden County Medical Society met and the minutes book reported: "In the case of Dr. Sophia Presley, female practitioner of Medicine, they [censors] were unable to decide and referred her application to the Society to act as a body. After discussing the Members and Resolution by Dr. Marcy which on motion was tabled. The next meeting was held in May and Sophia's application was received and adopted but at the meeting on November 13, 1883, 'Miss Sophia Presley not receiving the requisite two-thirds vote was rejected.' "[9,22]

For seven years, Sophia tried to become a member of the Camden County Medical Society; her applications repeatedly were rejected until May 1890, when her name was placed before the 55 members of the Camden County Medical Society (the State Society had 1,652 members) and her nomination was accepted.[21]

Dr. Presley's first practice was at Third and Market Street and then she moved to 405 Penn Street; over the next 25 years, Dr. Presley moved nine times.[9]

At the 1892 Annual Meeting, the reporter from Camden County, E.P. Townsend, MD, noted the county was in a flourishing condition and the Medical Society was growing because of the need for such organized medicine—"a strong factor is the advancement of medical science by the interchange of personal experience."[9] Dr. Townsend also noted Dr. Presley reported on antikamnia, a new remedy. The following year, 1893, Dr. Presley was 1 of 11 members (out of 61 members) who responded to Reporter Daniel Strock's letter.[6] She reported a case of cerebral apoplexy, resulting in death, a case of uterine cancer with an operation, followed by death. In answer to Dr. Strock's questionnaire for the Annual Meeting of 1893, Dr. Presley noted that strict quarantine was the best measure to prevent disease. In his report, Dr. Strock did note the lack of interest by the physicians who did not respond to his letters.[9]

In 1894, Sophia was appointed chairman of the gynecological department of the City Dispensary. In addition, she taught at the New Jersey Training School for Nurses and served on the board of trustees of the West Jersey Orphanage for Destitute Colored Children. Dr. Presley was secretary of Camden County Medical Society from 1894 to 1895.[2,21,22]

For every Annual Meeting, the Camden County Medical Society submitted a summary of events formulated by the appointed reporter. In 1895, Dr. Presley contributed to this report highlighting some of her interesting cases: "A case of cholelithiasis, in which there was no operation, but the patient passed, by rectum, eight large gallstones, the largest measuring 15/16 of an inch in its shortest diameter and 1-1/16 of an inch in its longest diameter; patient now is doing well. Interesting case of typhoid fever, with meningitis; at this report, patient is still alive. Case of constipation and catarrh of the bowels, in which the lining of the colon and rectum was thrown off in large worm-like masses, handfuls at a time, white and tense; recovery."[9] The following year, Dr. Presley also replied to the reporter's questionnaire noting treatments used: "I have used antitoxin in four cases. Each child had two injections, and to one of them the third injection was given. At the same time, the most energetic squabbing, and spraying was kept up every half hour, only allowing the children to have four hours for sleep at night. Antitoxin may have mitigated the virulence of the diphtheritic poison, but I am not at all sure about it. I now have patients taking protonuclein and thyroid extract, but I can only say that I think the medicines are doing good."[9] She continued in her report to comment on interesting cases: "Notes of a case of cirrhosis of the liver, revealed by autopsy, in an infant at the age of eight months. No irregularity or jaundice was discovered before the child was three weeks old. The last symptom before death was dropsy. The child tapped three times, two quarts and a half-pint of fluid being discharged in the aggregate."[9]

Eighteen hundred ninety-seven was a fairly healthy year in Camden County, though la grippe was a formidable epidemic. Sophia served as a delegate for the County to the Annual Meeting; the County Society now had 70 members, and the State Society had 848. For the next five years, the reporter noted "quarterly meetings were well attended, scarcely a member absent." And, Sophia was active and involved in all aspects of organized medicine: "In the county and city medical societies, as well as the Medical Society of New Jersey, Dr. Presley was an earnest attendant at the regular meetings, and taking part in the discussions of the medical subjects before the societies."[9]

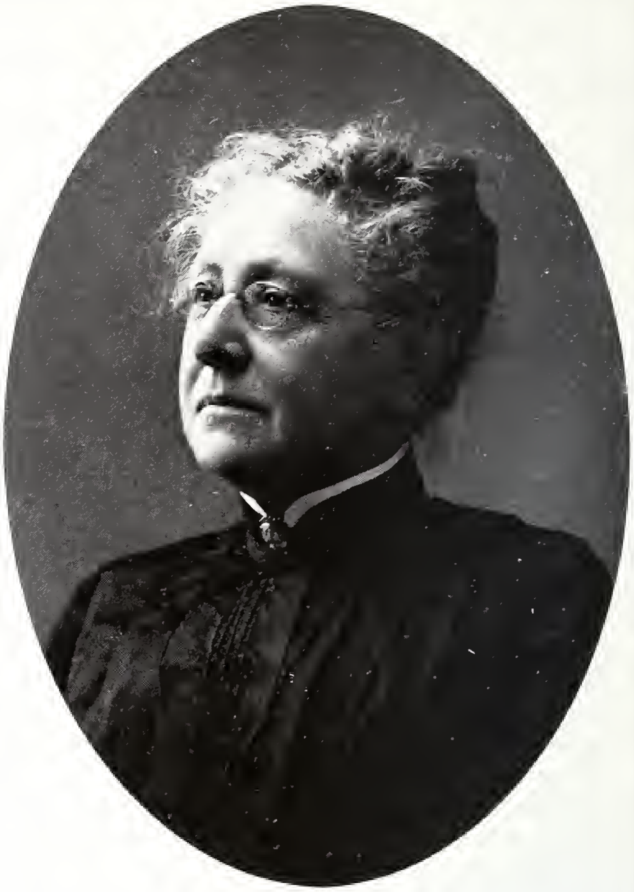

Figure 5. After graduating from the Woman's Medical College of Pennsylvania in 1876, Dr. Sophia Presley settled in Camden, and became the first woman member of that county society. (Published with permission, Camden County Medical Society.)

Dr. Presley was the author of numerous papers on medical subjects (rectal polypi and puerperal fever) and on nonmedical subjects for the Woman's Club of Camden and the Woman's Park Association. In addition, she was a member of the American Medical Association.

Dr. Presley died suddenly at the age of 75 on November 28, 1909, at her home at 333 North Seventh Street, in Camden.[15,21] Her funeral was held at St. Paul's Episcopal Church on Market Street and it was reported that four of the honorary pallbearers were women medical doctors of Camden: Drs. Jennie B. Sharp, Emma M. Richardson, Beulah Hollinshed, and Lettie Allen Ward. A special meeting of the Camden County Medical Society was held upon her death, and the following statement was unanimously adopted by the membership: "It is with sincere sorrow and regret that the Camden County Medical Society has learned of the death of one of its most useful members. . . . In all her appointments Dr. Presley rendered faithful and meritorious services."[9] ☐

Anna Hand

Cape May County

Though the physicians of Cape May County tried to organize a medical society in the early 1800s, it wasn't until 1883 that an organized group of practictioners established themselves.[20] At the turn of the century, the Cape May County Medical Society elected its first woman member, **Anna M. Hand, MD.**[9]

Born at Cape May Court House on January 1, 1849, Anna Maria Hand was descended from Revolutionary War stock, as her maternal and paternal ancestors were in the war.[23] Anna was educated in her hometown at the House Common School and completed two years of study at the New Jersey State Normal School. Anna then taught school for seven years in Eastern Pennsylvania, until she decided to enter medical school.[23] She graduated in 1890 from the Woman's Medical College of Philadelphia along with Caroline Marsh.[15]

After graduation, Dr. Hand completed post-graduate work at the Polyclinic Hospital and worked for two years at the Maternity Hospital and Nurses School in Philadelphia. She was awarded her Pennsylvania license in 1891, and her New Jersey license in 1892.[24,25]

In 1892, she returned to her hometown and opened a private practice at 510 Washington; she was the first woman physician in Cape May Court House.

Dr. Anna Hand was 1 of the 18 members at the 1901 meeting of the Cape May County Medical Society, having just been elected into membership. In 1906, Margaret Mace, MD, of North Wildwood, joined the Society, and there now were 2 women physicians in the 23-member organization.

In 1909, Dr. Hand was nominated as vice-president and served with Virgil Marcy, MD, president. In 1910, Dr. Hand was elected president, and Dr. Mace was elected vice-president; the Society had 19 members and the State Society had 1,388 members. The minutes of the meeting, held at the Hotel Bellevue, Cape May Court House, recorded this memorable moment: "The Society enjoys the unique distinction of being the only one in the state having a woman president and vice-president."[9] As president, Dr. Hand encouraged all members to support the organization, and invited "all legally qualified physicians practicing in Cape May County to unite with the Society."

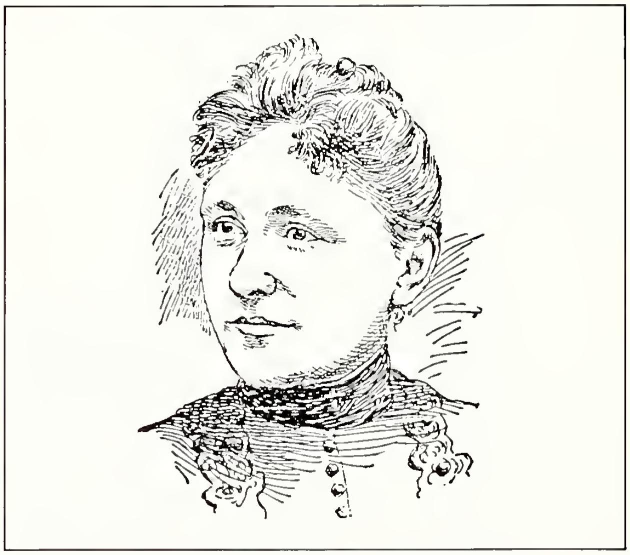

Figure 6. A line drawing of Dr. Anna M. Hand, the first woman member of our Cape May County society, was published in 1897.[23]

The County reporter, Eugene Way, MD, noted over the next few years that attendance at meetings was low: "We regret the lack of interest in the welfare of our Society manifest on the part of many of our members. This, however, may be due in part to the fact that the members are widely separated and means of transportation are not always convenient."[9]

After years in Cape May Court House, Dr. Hand moved to Philadelphia in 1914, where she maintained a general practice; her new address was 122 South 17th Street, Philadelphia.[15]

In 1915, Dr. Hand resigned her membership in the Medical Society of New Jersey; she did maintain her membership in the American Medical Association, and their records note a change of address to Philadelphia, until 1918.

In 1918, Anna received her New York license, but it is unclear whether she practiced in the city. She lived in New York as of September 3, 1920. On March 2, 1921, Anna Maria Hand, MD, died at the age of 72 in New York City.[24,25] ☐

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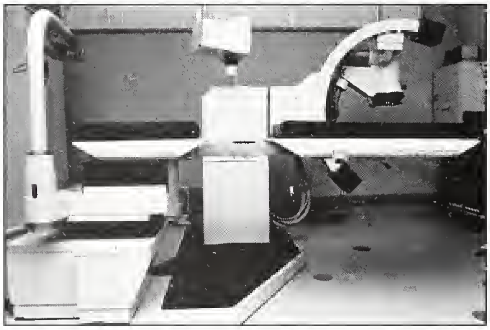

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Mary Dunlap

Cumberland County

Fourteen physicians met on a cold, winter day, December 8, 1818, to form the Cumberland County Medical Society. The group wrote the Society bylaws, and adopted them at a meeting in January 1819 at Brewster's Hotel in Bridgeton; they chose Ebenezer Elmer, MD, as their first president.[9] But the Society remained inactive until 1849, and in 1901, elected its first woman member, **Mary J. Dunlap, MD.**

Born in 1853 in Philadelphia, Mary J. Dunlap was awarded her medical degree in 1886 from the Woman's Medical College of Pennsylvania.[15] She practiced in Philadelphia, until Dr. Joseph Parrish, a friend of Dorothea Dix, was notified of Mary's good work, and invited her to become the director of the Burlington sanitarium for the treatment of "nervously depressed or deranged women with ailments ranging from insanity to neurasthenia brought on by ill health or by addiction to drugs."[10,26]

On November 15, 1889, Mary became the medical director and the superintendent of the newly established Home for the Feeble-Minded, in Vineland (now the Vineland Developmental Center). The year before, the New Jersey Legislature established the Home under the directorship of S. Olin Garrison; Dr. Dunlap succeeded him as superintendent six months later. The Home, located on 50 acres of land, between farmlands and orchards, featured an administration section and an instruction area, where "every modern method of caring for the state's dependent and defective wards is employed. Physical training in a well-equipped gymnasium is an important feature of the Home's life. Well-ventilated and well-lighted dormitories, with a complete system of water supply and fire escapes, greatly aid in sustaining the high standard of healthfulness in the institution. Other structures comprise a laundry, power house, supply heat and a pump for raising sewage into the Vineland system, together with barns and stables. All the buildings are lighted with gas and electricity."[26]

Figure 7. Mary Dunlap, MD, was the first woman member of the Cumberland County Medical Society, and served as the first woman president of the Association of Medical Officers of American Institutions for Idiotic and Feeble-Minded Persons. (Courtesy of the Vineland Historical and Antiquarian Society.)

Dr. Dunlap's yearly report detailed her administrative functions and described her philosophic ideals. In one report she wrote, "To the inquirer, 'Can they be cured?' there is, of course, but one reply: the condition is not a curable one, but to get them up and to keep them at a certain standard is a gain. The degree of improvement must ever depend on the cause of the disease. We have no medical restraint or punishment. Close supervision and moral suasion is the rule. The general interest and good care exercised by our present assistants is gratifying to me and beneficial to the patients." Ten years later, when she was more sure of herself, and bolder in her style, she wrote: "I am convinced that the time has come when the state should make arrangements for the better and closer state care of the tuberculosis poor, and thus remove this widespread source of infection and contagion to the community at large. . . . New Jersey, the leader in every good work for the betterment of her citizens, will not be behind her sister States in this intelligible form. Some simple 'camp' cottages, high on some of the health-giving hills, which so fortunately lie within her own boundaries and in her own possessions, should be established where—with pure air, the simplest, most nutritive food and hygienic, clean living rather than manufactured compounds of animal, vegetable, or mineral kingdom, a compound environment of harmony of color and symmetry of lines—there could be found useful employment adapted to these debilitated unfortunates, enchained by their destructive bacilli, whether inherited or acquired."[27]

Dr. Dunlap was recognized as a pioneer woman administrator of a state institution, and in 1899, she was elected the first woman president of the Association of Medical Officers of American Institutions for Idiotic and Feeble-Minded Persons (now the Association for Mental Retardation). In her inaugural address, she wrote, "Proud that I am a woman, I rejoice that I have the training as a physician, and that I can stand, today, your confrere in this conflict for evolving the best, highest, perfect type of life human."[28]

Nineteen hundred one proved to be an exciting year for the 36 members of the Cumberland County Medical Society and Mary. In January, the Society elected her as their first woman member and on April 9, 1901, the Society elected their second woman member, Reba Lloyd, MD. The Cumberland County reporter noted changes in the Society: "Increasing interest, increasing attendance, increasing memberships, and an increasing number of regular meetings briefly epitomizes the work of the Cumberland County Medical Society for the past year."[9] He also noted that at the January meeting, held in Bridgton: "Dr. Mary J. Dunlap, a newly elected member, was present, this being the first attendance of a woman who was a member, at our regular sessions."[9]

Dr. Dunlap was a very active voice in organized medicine—she served as the vice-president of the Society in 1903, and on April 12, 1904, was elected president of the 46-member Society. This historical moment—the election of the first woman president of a New Jersey county society—did not occasion notation in the minutes of the county society. Dr. Dunlap also was a member of the American Medical Association. In addition, Mary was active in civic affairs: she was a director of the New Jersey Legal Aid Association for Women, a life member of the Vineland Historical and Antiquarian Society, and a charter member of the Vineland Women's Club.[26]

In 1906, a report on the Home noted Dr. Dunlap's contributions: "Not a step in its development that has not the impress of Dr. Dunlap's mind and heart. She speaks of it as her lifework. Its order, domesticity, cheerfulness, and charm are of her and from her. In the wider range of her influence must be reckoned the outside recognition given to her abilities and character."[26]

On April 13, 1909, Dr. Dunlap resigned from the Cumberland County Medical Society; the secretary noted that "the efficient medical superintendent resigned and it was accepted with regret."[9] On May 1, 1909, she married Clarence Snyder of Racine, Wisconsin.

Mary then resigned as superintendent of the Home for the Feeble-Minded and was replaced by Dr. Madeline A. Hallowell. The Dunlaps moved to Wisconsin later that year. Mary's husband, Clarence, was well known and respected in Racine. Born in New York City on March 12, 1853, Clarence moved to Wisconsin in 1873. He was a teacher, local editor, attorney, justice of the peace, postmaster of Racine, insurance agent, and editor and publisher of the *Daily News of Ashland, Wisconsin.* Two years before his marriage to Mary, in 1907, he founded and promoted his own company, the Racine Heel Protector Company, a knit product placed inside a shoe to prevent slippage.[29] Soon after the outbreak of World War I, they moved to New York City with Clarence's son from his first marriage to Isabel Elkins. Clarence died shortly after this move, and Mary returned to Racine; she was listed in the city directory as a widow in 1923 but records do not list her anytime after that date. ☐

Figure 8. Dr. Hallowell served as superintendent of the Home for the Feeble-Minded in Vineland, after Dr. Dunlap resigned. (Medical Society of New Jersey.)

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Eleanor Haines

Essex County

On June 4, 1816, five physicians met at Moses Roff's Inn, on Broad Street, in Newark, to organize the third county medical society in New Jersey. The group elected John D. Williams, MD, as its first president, and from that day forward the organization grew and prospered. And, in 1876, the Essex County Medical Society was the second county society in New Jersey to induct a woman member, **Eleanor (Ella) Haines, MD.**

Born in 1846, Ella Haines was born to Alfred C. and Fanny Swann Bradley; her father was a New Jersey physician, and her maternal grandfather, Dr. Joseph Bradley, was a Philadelphia doctor. (Her brother Byron also became a physician.) Ella entered the Woman's Medical College of Pennsylvania, and was one of the two graduates of the class of 1871.[15,25,30]

After graduation, Dr. Haines was awarded her Pennsylvania and New Jersey licenses. She settled in Newark, and opened her practice at 41 Bank Street. In 1876, with five years experience to her credit, Ella applied for and was granted membership in the Essex County Medical Society.[9] The 60-year old organization was the largest county society, with 56 members (12 percent of the membership).

Her reputation as a physician was great; she was respected and admired: "She had an unusual record, it having been said of her that she never lost a case of pneumonia, scarlet fever or diphtheria, except in a few instances where she was called in after the case had progressed too far for medical aid. Dr. Haines had a large circle of personal friends in this country and abroad. During her many years of active work, she gave much time to the poor, giving her services freely, and contributing largely of her means. Though her mature life was spent almost wholly in the city, she never lost her childhood love of life in the open and had a passion for flowers."[25]

As her practice grew, Dr. Haines moved to a home/office she had built at 934-936 Broad Street, in Newark. Dr. Haines served Essex County Medical Society as a delegate to the Annual Meeting, representing the county in 1894, in 1911, and in 1912. In addition to her membership in the Medical Society, Dr. Haines had a great many interests and was affiliated with the Daughters of the American Revolution, the New Jersey Historical Society, the National Geographic Society, and the Colonial Dames.

It was reported that Dr. Haines was a shrewd businesswoman as well as good doctor: "Although singularly lacking in the desire for personal publicity characteristic of some successful women, was a remarkable personality to those who had the privilege of her friendship. . . . When she was graduated from medical college it required high determination to adopt a profession then deemed entirely inappropriate to her sex. Dr. Haines not only overcame this prejudice, but made a place for herself equal to any of her contemporaries. She naturally espoused the cause of suffrage when 'woman's rights' were exceedingly unpopular and lived to see them become ultra-fashionable."[30] She was one of the earliest investors of the Prudential Insurance Society, proving her business acumen.[25] And, she bought the property on the southeast corner of Broad and Franklin Streets in Newark that increased in value ever since her purchase.[30] Dr. Haines retired around 1914, but she did "receive a few at her office for advice."[30]

Dr. Haines remained a member of the Essex County Medical Society until her death at home on April 23, 1924, of senility, at the age of 78.[9,15] Upon her death, a report presented at the Annual Meeting of her alma mater noted the following: "[Her] house was filled with souvenirs of her wide travels in this country and abroad. She had been around the world and visited many points of interest more than once. To know her own country well was one of Dr. Haines's special ambitions, and many trips within its borders were made by her. She was aboard the first passenger vessel to pass through the Panama Canal. . . . She was a supporter of the suffrage movement for women before it was a popular cause and of other welfare undertakings for women and for children, and a liberal contributor to church and charitable societies. Having lived here [Newark] for many years, Dr. Haines was identified with the business interests as well as the philanthropic undertakings."[25]

Her last will and testament noted her final thoughts: "I feel that whatever estate I leave has been acquired in my professional work and should ultimately revert to charitable societies in my field of labor." After her family and friends were given their bequeaths, the residue was given to the Home for Crippled Children, the Women's and Children's Hospital, and the Baptist Home for the Ages.[30] ☐

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Ruth Clement

Gloucester County

On December 8, 1818, while Cumberland County was busy organizing their medical society, 13 physicians from Gloucester County met at the Public House of Jesse Smith in Woodbury to create the Gloucester County Medical Society.[12] These medical men elected Dayton Lummigas, MD, as the first president of this organization. The group met two times a year from 1818 to 1821; meetings were resumed in March 1830, but soon were suspended. In 1846, the Gloucester County Medical Society was issued a new charter and regular meetings soon were the order of business. Originally, Gloucester County contained Camden and Atlantic counties, but with the division, the medical society was referred to as Old Gloucester County Medical Society.

A small, tightly knit community, Gloucester County maintained its size and its "small-town" image. It wasn't until 1915, when Henry L. Sinexon, MD, was president, that the Gloucester County Medical Society elected its first woman member, **Ruth Clement, MD.**[9] The Society had 25 members, and the State Society was composed of 1,607 physicians.

Born to Mark and Katherine McDermot Clement in 1848, Ruth spent her childhood in Paulsboro. After finishing her early education, she worked for the Philadelphia Mint and then went to medical school. Ruth received her medical degree from the Woman's Medical College of Pennsylvania on March 14, 1889. She worked in the college hospital for a number of years and then opened a private practice at 1523 Race Street in Philadelphia.[31] She was awarded a Pennsylvania medical license in 1889 and a New Jersey medical license in 1907.[10,15] A regular physician, Dr. Clement opened a private practice in National Park around 1915, that she maintained until her death. In National Park she worked as the medical inspector of the schools in addition to her office practice.[31]

Minutes from County Society meetings rarely mention her name. In 1921, Dr. Clement was elected one of five delegates to the Camden County Medical Society and was re-elected the following year.[9] Dr. Clement's name was noted on the roll call at the February 25, 1924, meeting.

Dr. Ruth Clement died at home on January 26, 1925, at the age of 77, from a cerebral hemorrhage; she was buried at Eglinton Cemetery.[9,15] There was a tribute to Dr. Clement from Sarah Palmer Byrnes that appeared in the Alumnae Association *Transactions* in 1925:

> The death of Dr. Ruth Clement after some years of gradually failing health removes a woman of a very rare personality from our midst. Her singularly buoyant freshness and freedom of spirit which rose above the commonplaces and trivialities of life, which turned tragedy into comedy every day in the week, turned tears into smiles, and brought health and healing by sheer personal force and charm and sincerity of character, was remarkable and unique. Struggling hard to obtain her professional ambition against many odds, she achieved a degree of success which only those she helped can measure, and which only failing strength and advancing years has limited—vaccine physician, medical inspector, was a member of the Gloucester County Medical Society, Browning Society, Press Club, etc. and (what few of her large circle of acquaintances probably knew) was really gifted as a poetess when moved. A daughter of friend Catherine Clement, associate of Lucretia Mott and other active abolishionists and public-spirited reformers of a generation ago, both she and her sister, Anne L. Clement, have entered actively into the life and uplift of every community in which they have settled. To those who leaned upon her even in her frailty—for cheer and support, her family and friends, her loss is unmeasurable. Her friendship was a rare jewel, and fortunate are those who have possessed it.[6]

At the time of her death, there were 30 members of the Gloucester County Medical Society. A brief obituary in the March 1925 issue of *The Journal of the Medical Society of New Jersey* stated Dr. Clement had been an active member of the Gloucester County Society and of MSNJ. ☐

Florence De Hart

Hudson County

In 1840, a new New Jersey county was formed when a portion of Bergen County was reproportioned to create Hudson County. Though the new boundaries confused some of the townspeople, the physicians were interested in forming a new Society to better care for the local communities. A charter was granted to form Hudson County Medical Society on May 13, 1851, and the Society held its first organizational meeting in October with 37 members.[9] Forty-eight years later, Hudson County Medical Society, under the leadership of President Charles K. Law, MD, opened its doors to its first woman member, **Florence De Hart, MD.** By 1889, the Hudson County Medical Society boasted 72 members of the 879 members of the State Society.

Florence De Hart was born on August 30, 1871, one of four children. Her parents were well educated and expected the same of the children in the family. Her father was John Somers De Hart, originally from Mount Freedom; he graduated from Princeton University in 1860 and then received his law degree in 1864 from Princeton University School of Law. After graduation, he moved to Jersey City where he practiced for 40 years. Soon after moving to Hudson County, John De Hart married Dr. Lucy Madana Batcheller Fuller (1840-1911) in 1868. Lucy was a physician who practiced in Jersey City. They lived at 8 Paulnier Place, eventually moving to 99 Mercer Street.[10, 32]

Florence De Hart graduated with Emma Weeks from the Women's Medical College of the New York Infirmary in 1893; a year later, her sister Clara graduated in the class of 1894. Florence received her New Jersey license in 1893 and her New York license in 1895. Immediately after graduation, Dr. De Hart interned at the New England Hospital for Women and Children, Boston, and then returned home to practice with her mother and her paternal aunt, Sarah, at 99 Mercer Street, Jersey City.[32]

Dr. De Hart joined the Hudson County Medical Society in 1899 and remained an active member until 1902. At that time, Dr. De Hart was 1 of 137 members of the County, the second largest county membership in the state (the State boasted of 1,061 members). According to letters from a Society reporter, Dr. De Hart did not attend State Society meetings, but attended County Society affairs.[9]

After resigning her membership in the State Society, Dr. De Hart became the resident physician for the State Home for Girls in Trenton. Her brief obituary in the *Journal of the Medical Society of New Jersey* noted she died suddenly from intestinal disease at the Home in early February 1906.[9] ☐

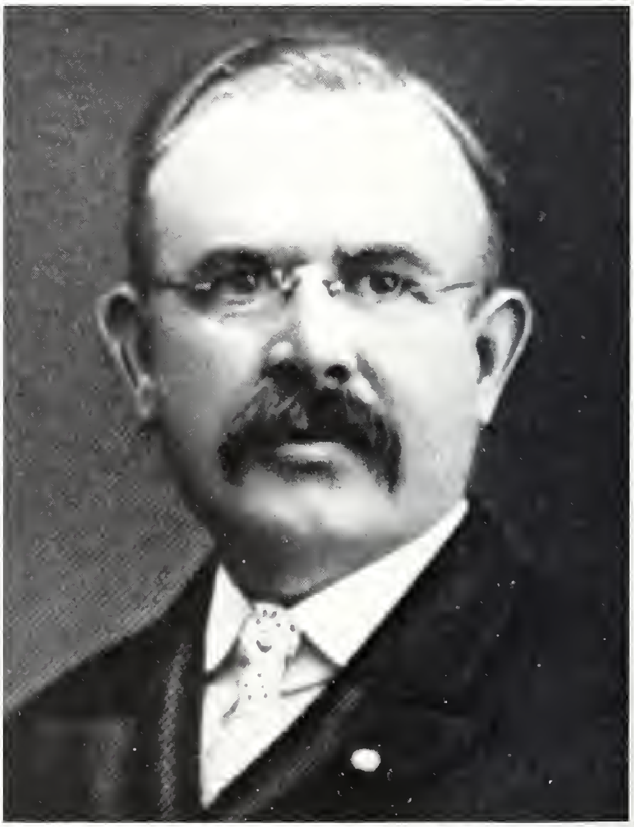

Figure 9. Dr. Luther Halsey was president of the State Society when Dr. De Hart was elected into membership. (© Medical Society of New Jersey.)

Alice Clark

Hunterdon County

Hunterdon established its county medical society in 1821. Physicians met in Flemington on June 12, 1821, and appointed Nicholas Belleville, MD, as the first president. But the Society did not prosper and a reorganization was attempted in 1836.[12] Finally, in 1846, the Hunterdon County Medical Society was able to establish itself as a permanent professional association. It was not until 1936 that the Hunterdon County Medical Society elected its first woman member, **Alice Lampham Clark, MD.**[9]

Alice Lampham was born on September 9, 1903, in White Cloud, Michigan; she had an older brother and two younger sisters. The family moved during her teenage years, and Alice graduated from International Falls High School in Minnesota. In 1926, Alice received her bachelor of science degree from Syracuse University, New York. Soon after graduation, Alice married Joseph D. Clark, and her address was listed as Akron, Ohio.[32]

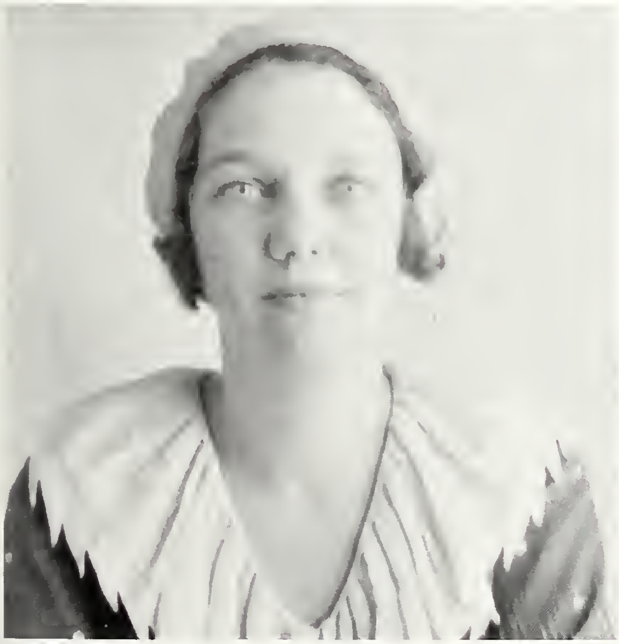

Figure 10. A member of the graduating class of 1933 at the State University of New York at Buffalo, Dr. Alice Clark became the first woman member of our Hunterdon County Medical Society. (Published courtesy of University Archives, SUNY at Buffalo.)

While Joseph completed a doctorate in chemistry, Alice entered medical school. Notes from the dean stated Alice was well liked as a student, and graduated in good standing, being number 24 in a class of 65 students. She was awarded her medical degree from the University of Buffalo School of Medicine on June 14, 1933. She served an internship at Buffalo City Hospital; she was awarded her New York license in 1933 and her New Jersey license in 1934.[34]

Joseph worked as a research chemist and spent time in Peru while Alice remained at home. A general practitioner, Dr. Clark opened a practice in Lambertville in 1934.[9,32] Her practice was largely devoted to family care, and Alice delivered many children in the local community, including the children of her sisters and brother.

In 1936, the Hunterdon County Medical Society had 21 members; the State Society was composed of 2,839 members. Alice was elected in 1936 and remained a member until 1938. On December 8, 1938, she joined the Mercer County Medical Society and for the next 16 years was an active participant. She had an office at 206 West State Street in Trenton, resided in Toms River, and was affiliated with Mercer Hospital, Trenton.[9]

In addition to her membership in MSNJ, Dr. Clark was a member of the American Medical Association and the American Medical Women's Association.

In 1955, Dr. Clark applied for staff privileges at Point Pleasant Hospital, and at the age of 54, she moved her practice to her home at Gary Road, in Toms River. In 1957, she joined the Ocean County Medical Society and remained a member until her retirement in 1966. During these years, Alice was in semi-retirement with her husband, working part-time as a general practitioner. Dr. Clark devoted many hours to working for the First Aid Society and volunteering for many civic activities, especially with the young adults of Toms River.[33]

She and Joseph retired to Riverview, Florida. Living as a widow in the home she and her husband built on a lake, Dr. Alice Clark now is under the constant nursing care of her family.[32] ☐

S. Mabel Grier

Mercer County

A resolution was passed in 1848 allowing five physicians in Mercer County to organize a county society. The doctors met at the house of Samuel Kay in Trenton on May 23, 1848, and elected John McKelway, MD, as its first president.[12] And in 1907, the Society inducted its first woman member, **S. Mabel Grier, MD.**

William T. Grier and Mary West were married in 1879; the following year, their first child, Sarah Mabel Grier was born on July 30, 1880, and in 1884, Sarah's brother, William A.W., was born.[36]

Sarah graduated Salem High School and completed her undergraduate education in 1901 at Bucknell College in Pennsylvania. She received her medical degree from Johns Hopkins School of Medicine, Baltimore, Maryland, in 1905[37] [The first coeducational class at Johns Hopkins was in 1893.] Two years later, she received her license to practice in New York and New Jersey, and she moved to 32 West Street, Trenton.

On December 10, 1907, the Mercer County Medical Society inducted S. Mabel Grier, MD. The Society had 73 members and was in a state of growth and development. Dr. Grier's name disappears from the files after 1909.[9] Her records do show a name change to Mabel Grier-Lesher and a move to 247 East 8th Street, in Watsontown, Pennsylvania.[15]

During the 1920s, Dr. Grier-Leisher was a missionary in China, in the province of Sow Chow, with the American Baptist Foreign Missionary Society or the Protestant Missionary Society.[36,38] Dr. Grier died on September 11, 1969, at the age of 88. ☐

Caroline Marsh

Middlesex County

Five New Jersey counties organized local medical societies in 1816. Middlesex County physicians created the fifth group when eight physicians met on June 13, 1816, and 76 years later the Middlesex County Medical Society elected their first woman member, **Caroline H. Marsh, MD.**[9]

Caroline Hempstead Marsh was born in 1863. She received her medical degree from the Woman's Medical College of Pennsylvania in 1890 with her classmate Anna Hand. Caroline was listed as a regular physician.[10] In 1891, Caroline was awarded licenses to practice in New Jersey and Pennsylvania. That same year she applied to the Middlesex County Medical Society, and was accepted as the 25th member. Dr. Marsh's name is listed on the roster through 1894, but then her name was dropped from the membership listing.

In addition to her membership in the Middlesex County organization, Dr. Marsh was a member of the American Medical Association. Though a year was not given, she did write to the AMA and inform them she was married and thereafter was listed as Caroline H. Marsh-Wikle Farrell.[6,15]

In February 1913, Caroline listed her practice in Johnstown, Pennsylvania. During this time, Dr. Marsh worked for Dr. Bertha Caldwell of Johnstown. Neither one of these women were members of the Cambria County Medical Society of the Pennsylvania Medical Society simply because women were not accepted as members.[39]

In 1914, Caroline returned to New Jersey, to Metuchen, and then in December 1914, her AMA address card noted a move to Garwood.[15] Dr. Marsh returned to Pennsylvania, to Cresson, in 1918, and then moved back to Johnstown, and Dr. Caldwell's practice.[15,39]

Caroline died at the age of 59 on January 15, 1922, in Pennsylvania. ☐

Sarah Mackintosh

Monmouth County
Passaic County

In 1843, the physicians of Passaic, a county with 17,000 residents, applied for a charter to organize a medical society. The charter was granted in January 1844; the Passaic County Medical Society held its first meeting and elected Garret Terhune as the first president. Less than 30 years after this meeting, the Passaic County Medical Society inducted its first woman member, **Sarah Apfonda Mackintosh, MD.**

Sarah Apfonda was born in New York City in January 1836 to a prominent and well-to-do family. Her father, a born-and-bred New Yorker, was a major in the Army and her mother was originally from New Hampshire.[40]

At the age of 33, Sarah entered the Women's Medical College of the New York Infirmary, one of nine students in the class of 1872.[1] Before Sarah graduated from medical school, she married James Hetherington Mackintosh of Paterson, a pharmacist attending medical school at Bellevue Hospital Medical College in New York City. Sarah's final project for her senior thesis was on syphilis. Both Sarah and James received their medical degrees in 1872. Sarah and James then had three children: James Alexander (1872-1957); Sarah F. (1873-1956); and Lillith, who died in infancy.

In 1872, the Drs. Mackintosh moved to Paterson and began a private practice. On October 7, 1872, Sarah Mackintosh, MD, became the first woman member of the Passaic District Medical Society, and eight months later, in June 1873, made further history by becoming the first woman member of the Medical Society of New Jersey.[9]

The Passaic County Medical Society was organized in 1844; by 1872 there were 28 members. The minutes from the October 1872 meeting listed five new members, including Sarah and James.

Two years later, the Drs. Mackintosh established a new private practice in a combined home/office at 136 Carroll Street; in 1886, they moved to 194 Carroll Street.[41]

Sarah Mackintosh was one of the few women physicians to take an active role in organized medicine. Soon after her induction into the State Medical Society, she presented a paper to the membership in 1874 on the use of chloral hydrate in labor—the first woman to make a presentation to this all-male organization.[9] In 1876, Sarah became the county reporter for the Passaic County Medical Society. Sarah was absent from the 1876 meeting, but sent a communication with her husband who presented it at the 110th Annual Meeting on May 23, 1876, at Cape May City. The report detailed the work of the 30 physician-members.

Sarah Mackintosh belonged to other societies. In 1878, she became a member of the Association for Advancement of Medical Education for Women; her name, along with that of Dr. Elizabeth Blackwell, appeared on a report issued from a meeting of this group that took place in Union Hall, New York City. In addition, Sarah was elected Secretary of Ladies Hospital in Paterson in 1873—one of four officers. Ladies Hospital, first known as The Hospital of the Ladies Association, was created in 1871 by the women of the Paterson Benevolent Society. A public institution, that became Paterson General Hospital in 1887 and today is Wayne General Hospital, opened to accommodate the growing need for hospital facilities in booming Paterson. The hospital was considered "a ladies enterprise, the ladies alone would have the management of it."[42]

The Mackintosh family relocated to Asbury Park in 1887, where they bought a house/office at 515 Third Avenue. As soon as the family was settled, Sarah applied for membership to the Monmouth County Medical Society.

The Monmouth County component of the Medical Society of New Jersey was organized on June 3, 1816, in the Court House in Freehold. The physicians elected William G. Reynolds, MD, as the group's first president. In 1888, the Society elected Dr.

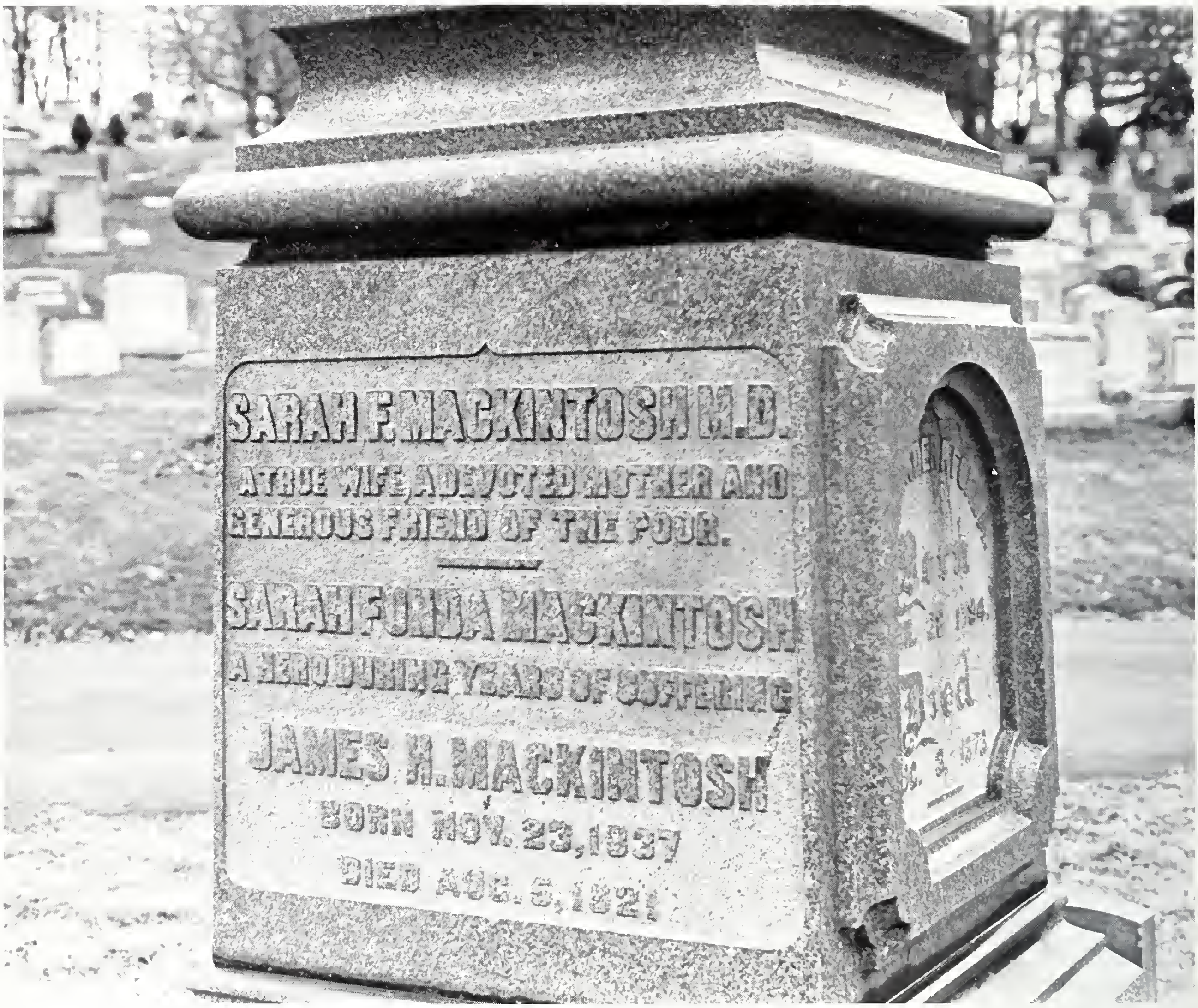

Figure 11. Dr. Sarah Mackintosh was buried in Cedarlawn Cemetery, Paterson; she was the first woman member of our Monmouth and Passaic County components, and the first woman member of the Medical Society of New Jersey. Dr. Mackintosh was active in Society affairs and served as County Reporter in 1876. In 1878, she became a member of the Association of Medical Education for Women, along with Dr. Elizabeth Blackwell. And in 1873, Dr. Mackintosh was elected secretary of what today is Wayne General Hospital.

Mackintosh, and added her name to the 44-person roster. Sarah made history again by becoming the first woman member of the Monmouth County Medical Society.[9] Sarah remained a member of the Monmouth County Medical Society for 15 years, but there is no information on her contributions to the organization.

The Mackintosh family again moved; this time to West Fifth Avenue in Asbury Park. Sarah was awarded privileges at Monmouth Medical Center, Long Branch, and remained an active staff member until her death. Dr. Sarah Mackintosh died at home in Asbury Park on October 19, 1903, and was buried in the family plot in Cedarlawn Cemetery in Paterson. Her tombstone reads: "A true wife, a devoted mother, and a generous friend of the poor." Obituaries appeared in the *Asbury Park Journal* and included the following: "Dr. Sarah Mackintosh was probably one of the best known women in Asbury Park . . . [She] did many kind and graceful acts of charity. She was always ready to give when called upon and did a great deal for the poor people of this city and surrounding towns in a quiet and unostentatious way."[40] ☐

Emma Clark

Morris County

On June 11, 1816, the Court House in Morristown was busy, as seven physicians organized the Morris County Medical Society. They elected their first president, Lewis Condict, MD, and met for the next 40 years.[9] In 1857, meetings were suspended due to a lack of interest and it was not until 1873 that the group was reorganized. From this point in time, the Morris County Medical Society grew and prospered, and in 1906, **Emma Chambers Clark, MD,** was elected to membership.

Emma Chambers Clark was born on September 26, 1866, in Malone, New York, to William and Elizabeth (Chambers) Clark. She entered medical school in 1899 and was 1 of 3 women in the 21-member graduating class of Syracuse University School of Medicine in 1902. Emma was the associate editor for the 1902 Onondagan, the school's yearbook, and a member of the Alpha Chapter of the Zeta Phi Fraternity. (Elizabeth Blackwell was the charter member of this organization.)[43]

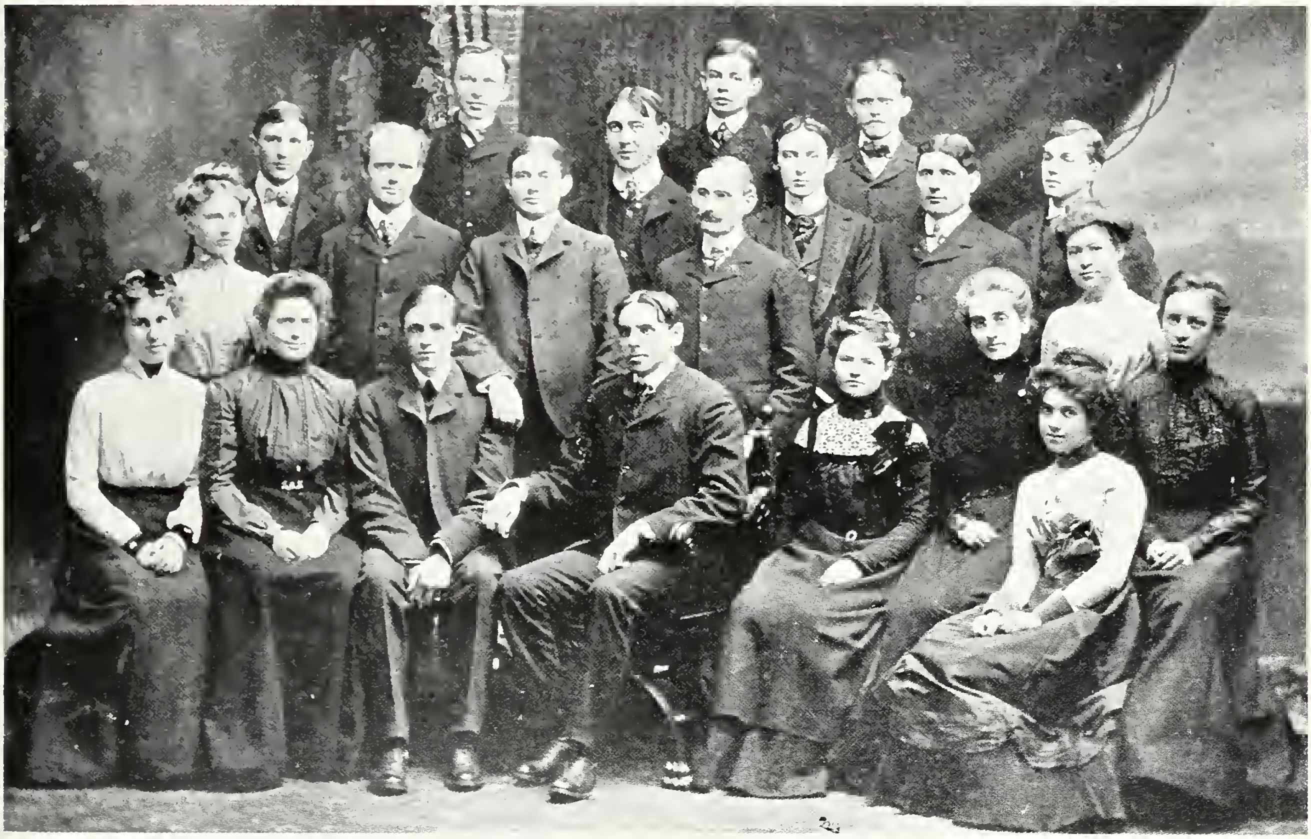

Figure 12. Dr. Emma Clark was 1 of 7 women in the 21-member graduating class of Syracuse University Medical School in 1902. Dr. Clark is seated in the second row, second from the right. (Published with permission, George Arents Research Library, Syracuse University.)

After graduation, Emma was awarded her New York license and she joined the staff of the Sanitarium in Clifton Springs, New York, as a pathologist, from 1902 until 1906. The *Alumni Directory* from Syracuse University also noted that Dr. Clark was listed as a general physician in New York in 1906.[15,42]

Dr. Clark applied for and received her New Jersey license in 1905 and the following year moved to Dover. A pathologist, Dr. Clark became affiliated with Dover General Hospital and served the institution until her death at age 57 on November 17, 1923.

Reporters for the Morris County Medical Society recorded County events with regularity. At the March 13, 1911, meeting, Dr. Vinton gave "an interesting talk on the work of the Public Health Committee." Dr. Clark, who attended this meeting, became the chairman for a committee to perform local volunteer work. This was to be the first of many such endeavors for Dr. Clark. The following year, at the March 12, 1912, meeting, Dr. Clark "made a personal canvas of the members present for help in the campaign for the betterment of public health which the national committee is organizing for the last two weeks in May." Emma succeeded in finding volunteers, to help her in this crusade.[9]

Figure 13. Dr. Clark was elected into membership in 1906, when Dr. Alexander Marcy, Jr, was president. (© Medical Society of New Jersey.)

At the meeting held on September 10, 1912, three discussion groups were held; Dr. Clark was the moderator for the talks: "Are Institutions for Tuberculosis a Menace to the Community?" "Is the Press a Reliable Source of Information Relating to the Status of Medical Science?" "Is Medical Inspection of Our Public Schools a Farce?" After the speakers concluded, the reporter noted Dr. Clark's remarks: "Dr. Clark said that the Dover school was the first in the state to carry out the regulations as to inspection proposed by the State Board of Health. The work was divided into three parts—inspection of school buildings, the pupils in the school, and all pupils who were reported sick in the district. She said that all their suggestions regarding the buildings had been given careful consideration and generally adopted. That several patients reported sick had been found to be suffering from such infectious diseases as scarlet fever. Isolation had prevented an epidemic. She further said that numerous cases of bad suppurating ears had been successfully treated and asked if any one knowing these facts could honestly say that school inspection was a farce."[9]

Though her name was not mentioned in the County Reporter's minutes for the next few years, Dr. Clark did attend the meeting on June 18, 1918, at the All Souls' Hospital in Morristown; her name was listed among the participants of the discussion group at the meeting.

In addition to membership in the Morris County Medical Society, Dr. Clark was a member of the American Medical Association; she was affiliated with both groups until her untimely death on November 17, 1923, of chronic myocarditis.[15]

At the December 11, 1923, meeting of the Morris County Medical Society, the following memorial[9] to Dr. Clark was unanimously adopted:

> Death, the great and unsparing reaper, recently entered our Society and took from us our respected colleague, Dr. Emma C. Clark.
>
> Dr. Clark had a most retiring and self-effacing disposition; so much so that her intimate association with many of our membership was limited. But with those who knew her best, her sterling worth impressed itself upon them.
>
> Dr. Clark was a woman of the highest type; therefore, as a physician she was true to her chosen profession. Her ideals were high, so high that she failed to reach them. Her last words spoken at a medical meeting in our little hospital in Dover were: "I tried so hard. I had planned so much; my strength failed me." She was speaking of her work in the laboratory, of how she had hoped to enlarge and better it.
>
> We shall long miss Dr. Clark and think of her as one of the Creator's choice handiworks.
>
> We would extend our sincere sympathies to her aged mother who is so sorely afflicted and the three remaining sisters who mourn her loss.
>
> Dr. Clark looked death in the face with thorough calmness, preparing quietly for it as though for a vacation and rest.
>
> She is resting. ☐

Marie Chard

Ocean County

In 1861, the administrators of the Medical Society of New Jersey felt Ocean County would be suitable for a component society. Drs. Hilliard and Disbrow, members of Monmouth County Medical Society, questioned the Ocean County physician population, about such a proposition. The local physicians, though, did not organize a medical society until 1874, and two years later, the Ocean County Medical Society became an established organization.The Society held meetings and members attended the State Society annual meetings, until 1895; the Society then suspended all activities for eight years. In 1903, ten physicians reorganized the Ocean County Medical Society, and five years later elected its first woman member, **Marie Louise Chard, MD.**

Born in 1868, Marie Louise Chard was one of 25 graduates of the 1895 class of the Women's Medical College of the New York Infirmary for Women and Children. After receiving her New York medical license in 1895, she was a one-year assistant physician in the out-practice. In a report from the Medical College, it was noted that this was not easy work, for the physicians attended sick women and children in tenement houses.[43-44] Living at West 34th Street, New York City, Dr. Chard was an assistant demonstrator of anatomy for the Women's Medical College from 1897 until 1899. In 1898, she served as a house physician, and from 1896 to 1907, she also served in the Department of Surgery in the dispensary of the Infirmary.[44] In addition, from 1902 to 1905 she was a junior attending surgeon.

Dr. Chard was affected personally and professionally by Emily Blackwell's decision to close the Women's Medical College; Dr. Chard wrote to Dr. Blackwell and received the following letter: "The opening of Cornell is a great step forward, and I hope all our young doctors will feel that however much they may at first regret the college, the whole change is an advance. I hope the Infirmary may become a center that will be ever more valuable to you all. I am glad you are working in it. I do greatly appreciate the good will and regard of all you younger workers, and I send my best wishes for growing interest and success of your work."

In 1908, Dr. Chard relocated to Lakewood. And, at the October 24, 1908, meeting of the Ocean County Medical Society, Dr. Chard was inducted into the 19-member organization. Dr. Chard was known as a regular physician in Lakewood, and practiced there for the next 11 years.[9]

During her years as a member, she rarely attended County Society meetings, usually held in the home of the County Society president. (As the only female member of this organization, she may have deliberately remained in the background, for her name never was mentioned in the reporter's minutes.)

In September 1920, Dr. Chard moved her gynecologic and consulting practice back to New York City, to 121 East 60th Street. Though she maintained her membership in the Union County Medical Society until 1922, she already had joined the Medical Society of the State of New York.[9]

Marie was active in New York State and national medical organizations: she was a fellow of the American College of Surgeons (1913); and was a member of the American Medical Association, of the New York Academy of Medicine, of the Women's Medical Association of the City of New York, of the American Medical Women's Association, and of the Medical Women's International Association.

An advocate for medicine, Dr. Chard's first love was creating opportunities for women physicians. During World War I, she helped to establish the American Women's Hospitals, and served on its Executive Board until her death.[44] The American Women's Hospital, with Dr. Chard's assistance, financed trips for 15 American women physicians and three dentists to the War Zone. Dr. Chard was

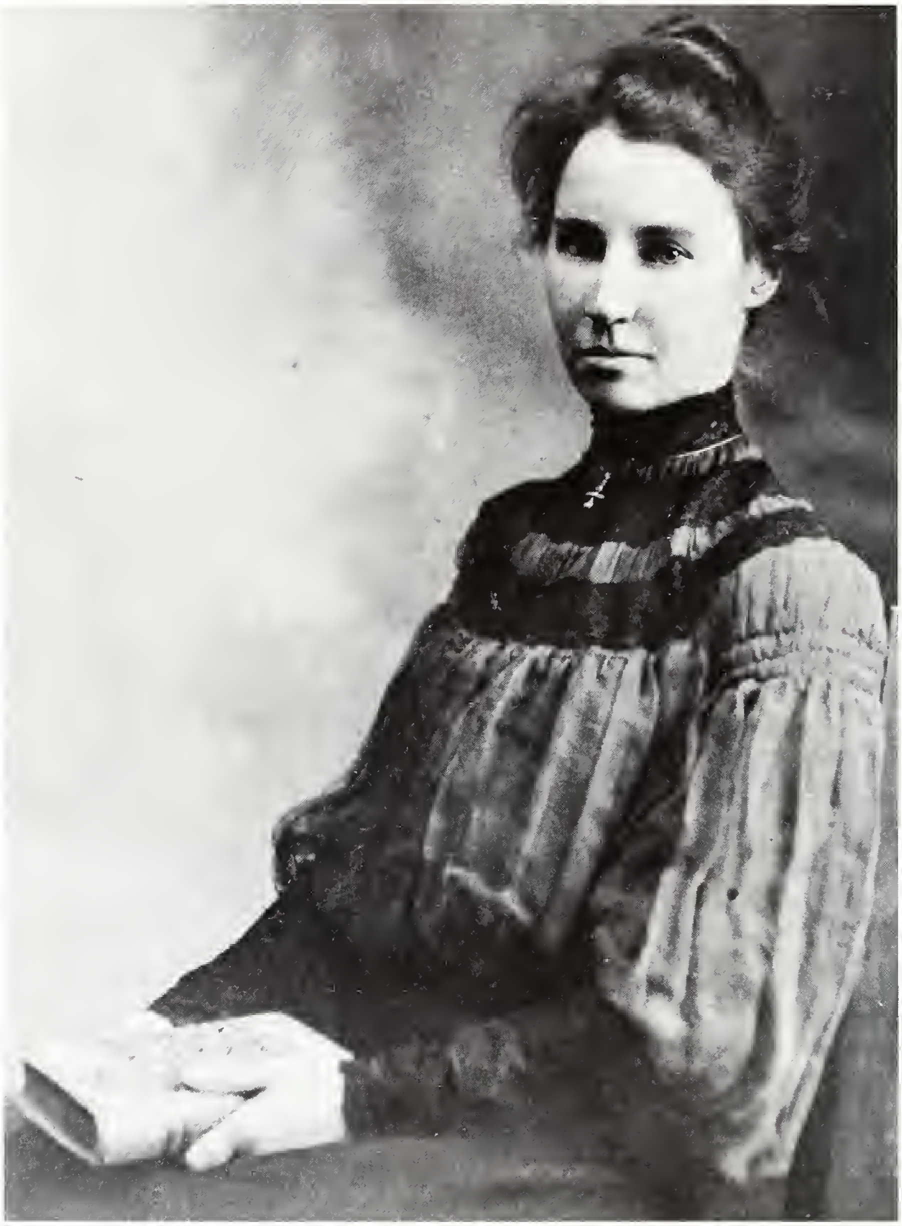

Figure 14. Dr. Marie Chard was the first woman member of our Ocean County component. She was very active in organized medicine. (Published with permission, The New York Academy of Medicine.)

a participant of the Medical Women's National Association War Service Committee (created in 1917). An able fundraiser, Dr. Chard helped to raise $200,000 for the War Service Committee.[10,44]

While fundraising for the War Service Committee, Dr. Chard also campaigned for monies for the Postgraduate Medical College and Hospital, New York. In addition to the funds, Dr. Chard served on the medical board from 1906 until 1927, and on the board of trustees from 1920 until her death 18 years later. During her affiliation with the College and Hospital, Dr. Chard was an assistant to Dr. Willy Meyer, in the Department of Surgery.

Dr. Chard was appointed to the second War Service Committee in June 1918, and in 1923 was reappointed, serving until her death. An article written shortly after her death noted that Dr. Chard "was deeply interested in the American Women's Hospitals, and the opportunities for women physicians this service made possible, as it extended from country to country, including Albania, Armenia, France, Greece, Japan, Russia, Turkey, Yugoslavia, and finally impoverished parts of the United States."[44]

On January 20, 1938, at the age of 70, Marie Louise Chard, MD, died of myocarditis. A brief obituary appeared in the *New York Herald Tribune* two days later, noting her work as a surgeon in New York City for 30 years.[15] ☐

Ellen Smith

Salem County

Seven physicians from Salem County organized their component medical society and held its first meeting on November 30, 1818. On May 4, 1880, Salem County Medical Society was reorganized, and almost 100 years from the Society's first meeting, Salem County physicians elected a woman member, **Ellen B. Smith, MD.**[9]

The second child of Mary Bradway (1836-1925) and Quinton P. Harris (1830-1919), Ellen Harris was born in Lower Alloways Creek Township on January 26, 1866, four years after the birth of her sister Lucy. Ellen attended local public schools and graduated Salem High School in 1884. She was a member of the 1892 class of the Woman's Medical College of Pennsylvania, and received her New York and New Jersey licenses that same year.[10,36,45]

After graduation, Ellen moved to Brooklyn, New York, and opened a successful practice. She married Winfield Scott Smith on May 19, 1891. [Dr. Winfield Smith was born on August 5, 1862, at Hancock's Bridge; he graduated from Long Island College of Medicine in 1878. He moved to Brooklyn and was on staff at Long Island Hospital.][46] After their marriage, the Drs. Smith continued to practice in New York City.

A few years later, the Drs. Smith moved to Salem and practiced at their home/office on East Broadway. Ellen's practice "became very extensive, especially among women and children."[45] Ellen took a keen interest in community affairs serving as president of the Woman's Club of Salem in 1904, as the chairman of the Department of Public Health in the New Jersey State Federation, and the National Federation of Women's Clubs, and as a member of the Oak Tree Chapter of the Daughters of the American Revolution.

When she was elected to membership in 1916, Dr. Smith was 1 of 24 members of this County Society, with the state organization having 1,684 members.

Known as Dr. Ellen, she was one of Salem County's most prominent and best known citizens. Dr. Ellen "had a large circle of close friends and adoring patients. There was perhaps no physician in the county who was closer to those to whom she ministered than was Dr. Ellen. She took more than a professional interest in her cases; she took deep and loving care of each one."[45] Newspaper accounts of her professional career noted: "In her busy life she not only found time to attend to those patients who were amply able to pay for her services but she also was never too tired nor too busy to give her ministrations to the poor. . . . she gave such unremitting and unselfish attention to those who needed her care."[45]

Dr. Ellen also was concerned about women in the medical field. "She pleaded that Club women should realize themselves and endeavor to impress upon their daughters and young friends the very promising careers opened to women in the medical profession." In an article, she wrote: "As to the monetary rewards they are good, but they are the least of the returns that await those who elect to follow in the footsteps of The Great Physician."[45]

On May 13, 1920, Dr. Ellen Smith died at the age of 54 from a fractured skull following an accident on East Broadway in Salem. Crossing the street on the night of her death, passersby noted heavy rain and possibly her umbrella obscuring the view of an approaching automobile. She was thrown violently into the roadway, and apparently was dead at the scene of the accident. The driver of the automobile took Dr. Smith to Salem County Memorial Hospital, but she already had died.[6,45]

A resolution passed by the Salem County Medical Society[9] noted her contributions:[9]

> This splendid service in the cause of relieving suffering humanity was best exhibited in her untiring, self-sacrificing devotion to their conscientious duty well performed. Her genial manner made her a more than welcome visitor to the sick and depressed; to the many of whom the dispensing of cheer and encouragement, rather than drugs, made the path easier for their convalescence and return to health.

In addition to the outpouring from the Salem County Medical Society, the local community expressed its shock at Ellen's tragic death: "Despite the exacting duties of a successful professional life, Dr. Ellen with a broadminded vision realized the needs of civic and intellectual stimuli for the betterment of the people she so wholeheartedly endeavored to serve. . . ."[45] Dr. Winfield Smith died at home on July 14, 1923, of a stroke, three years after the death of his wife, Ellen. ☐

Mary Gaston

Somerset County

On Tuesday, May 21, 1816, at 10 A.M, 9 physicians gathered at the Public House of Daniel Sargeant. These men made history by organizing the first county medical society in New Jersey. They elected Peter I. Stryker, MD, as their first president.[12] Seventy-five years later, in 1891, 17 of the 674 members of the State Medical Society, elected the 18th member of the Somerset County Medical Society, **Mary E. Gaston, MD,** the first woman member.

Born in Somerville in November 1855, to Hugh M. Gaston and Frances Mallet-Prevost Gaston, Mary Exton was one of seven children. In a childhood letter, Mary wrote, "I remember well various scenes of Civil War Days—the marching boys in blue on their way South—the summer evening where news of the draft-riot in New York reached our town and my father and mother sat in sombre silence and we children talked in whispers about a 'mob' which to us meant nothing at all. Then there was the thrilling occasion when the 'boys' came home—the war was over and a mile from town in the woods a whole ox was roasting for the necessary feast, a sight we children did not hesitate to visit before the soldiers arrived."[47]

Mary attended a four-room public school in Somerville, but this did not prepare her well for college. Upon her entrance to Vassar, Mary had to complete a "special course to catch up to freshman." After two years, Mary returned home because of family finances and became involved in a "study at home" project of Miss Tichnor of Boston.[46-48]

Mary recalled her decision to enter medical school in an essay: "And then in 1885, from I know not whence, came the desire to enter the medical profession. Would I have the courage to practice? Mother thought not. I quote from a letter I received from her at this time: 'You are a bundle of nerves,' she writes, 'sensitive to every sight and sound, and so not fitted for the profession. You would soon come back broken in health and spirits. I would rather have you go to Europe for a year."[47] But in 1888, Mary received her medical degree from the Woman's Medical College of Pennsylvania.[10,15] Mary recalled her medical school days, "I was very happy in the Woman's Medical College of Pennsylvania; work, yes of course, but the table teachers and professors of our day were always ready to help and were not only gracious but were generally possessed with a saving sense of humor that lightened the hard spots. Our pleasure at graduation was dimmed for us all by the historical snowstorm of March '88, which meant travel was impossible for all but nearby friends."[47]

After a 15-month internship at the New England Hospital in Boston, Mary returned to Somerville with her medical license issued in 1889. In the west end of her family home, Mary opened her office, a general practice at 18 West High Street; she was the borough's first woman physician.[48]

She was an energetic young physician; in her early career, Mary made her night rounds on foot, no matter what the time. She used a horse and carriage during the day and a story is told that her father gave her a gun for protection, but Mary always said she was more fearful of the gun than of any harm that could come to her on her daily rounds.

In 1891, Dr. Gaston became the first woman member of her county society. Over the next few years, Dr. Gaston became very involved in local medicine and helped to found the Emergency Hospital in Somerville on Maple Street. A history of the Emergency Hospital noted that this 13-bed hospital had money problems and was in existence only for two years. But the community realized that a hospital was needed and in 1900, property on East Main Street was purchased to create a new hospital. The Somerville Hospital had 12 beds, an operating room, and a staff of ten physicians—including Dr. Mary Gaston. The Hospital continued to grow: in 1903 an ambulance was purchased and in 1908 a new wing

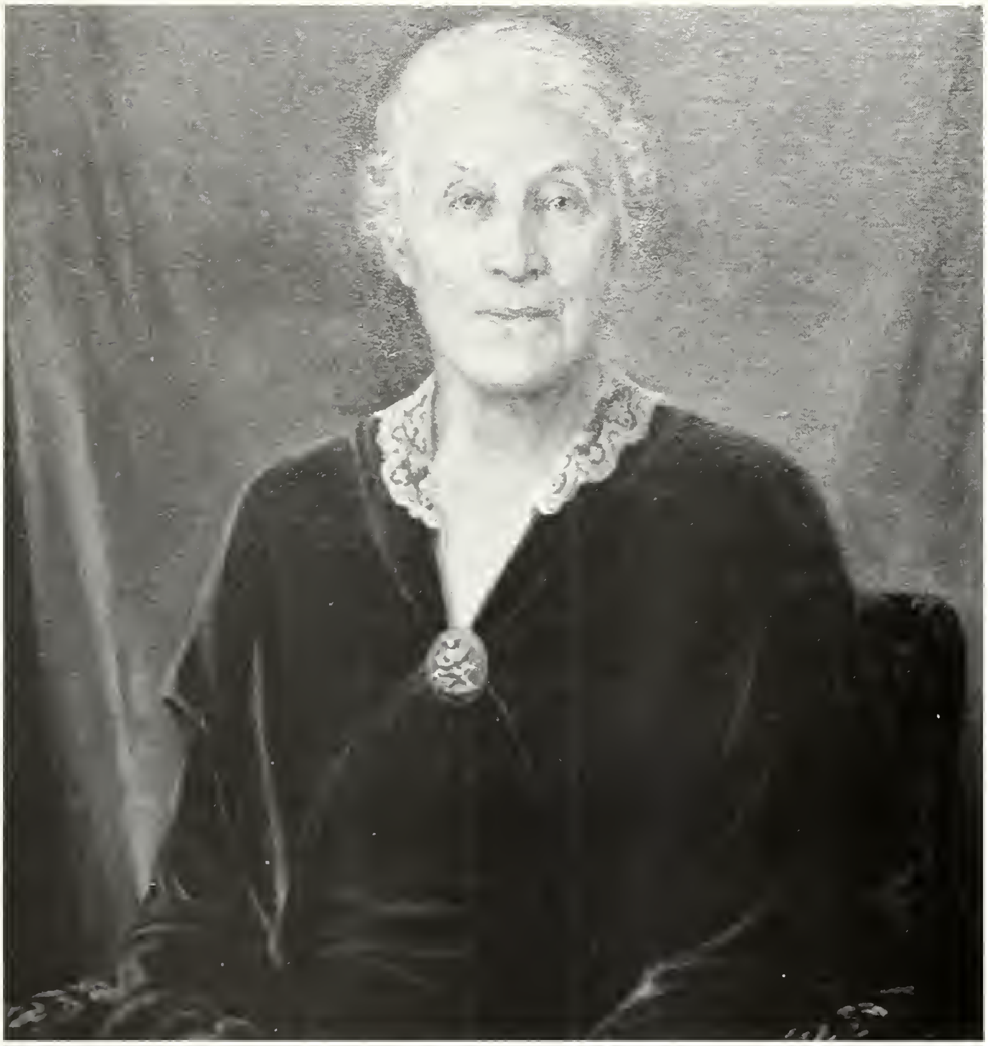

Figure 15. Dr. Mary Gaston was the first woman member of our Somerset County component, and the first woman physician in Somerville. Her portrait hangs in the Somerville Public Library. (© Spud Grammar.)

was added; in 1925, a new 100-bed hospital was built on Rehill Avenue; today there are 350 beds.[49]

Somerset County reporters submitted yearly statements to the State Society on local activities. Though Mary was active, her name did not appear on any records until 1894. Dr. A.L. Stillwell, MD, reported interesting cases in the county including one in the practice of Dr. Gaston. "Operation was also done by Dr. Stimson. At the time of operation, however, there was general peritonitis, and the patient died in about eight days from sepsis."[9]

Reporter J. Hervey Buchanan wrote on May 20, 1901, that Somerset County Medical Society "has to report a year of much interest and of well-attended and profitable meetings. The attendance has been uniformly good, the discussions well maintained." He noted that Somerset Hospital had opened, with help from Dr. Gaston, and "has seen good service, a number of major operations having already been performed there. The need of such an institution has been felt for a long while, and the efforts of the profession and the laity interested to secure it are much to be commended."[9]

Dr. Gaston retired from active medical practice in 1908 after a severe heart attack, and resigned her membership in the Medical Society in 1911. Dr. Gaston traveled extensively after this and devoted herself to civic work—she brought the Public Library to Somerville in 1910 and established the Somerville Civil League, the Red Cross Chapter of Somerset County, and the Somerset County Anti-Tuberculosis League.[46,49]

Dr. Gaston did go back to active duty once, during the flu epidemic in 1918. "A temporary hospital was set up and she was the doctor practically in residence."[47]

After a long illness, at the age of 100, Mary died of hypostatic pneumonia, on April 19, 1956. ☐

Katherine Stewart

Sussex County

Drs. Reuel Hampton and George Hopkins received approval from the State Society to create a county organization in May 1818. They returned to their hometown and along with seven other physicians tried to establish the Sussex County Medical Society on July 14, 1818.[12] But the effort of these physicians failed, and it wasn't until August 1829, that four doctors reorganized the Sussex County Medical Society. In 1943, this County Society elected its first woman member, **Katherine E. Stewart, MD.**

Born on September 28, 1911, in Jacksonville, Florida, Katherine was one of six women graduates in the 1935 class of the University of Cincinnati College of Medicine. She was awarded her license from the state of Ohio that same year.[10,15] Katherine completed an internship at the University of Wisconsin Hospital, Madison, in 1935 and at River Pines Sanatarium, Stevens Point, Wisconsin, in 1936. The following year, Katherine married a radiologist, Dr. Aitken, and they moved to New York.[50]

For the next few years, Katherine did not work in the medical field. In 1942, Dr. Stewart completed an internship at the Department of Internal Medicine, Bellevue Hospital. The next year, her husband accepted a position at a New Jersey company, and they moved to Railroad Avenue, Ogdensburg.[9] A few months later, Dr. Stewart and Dr. Aitken applied for and received their licenses to practice in New Jersey.

At the meeting of the Sussex County Medical Society on September 28, 1943, Dr. Stewart was inaugurated into the Society, becoming the 32nd member of the organization.

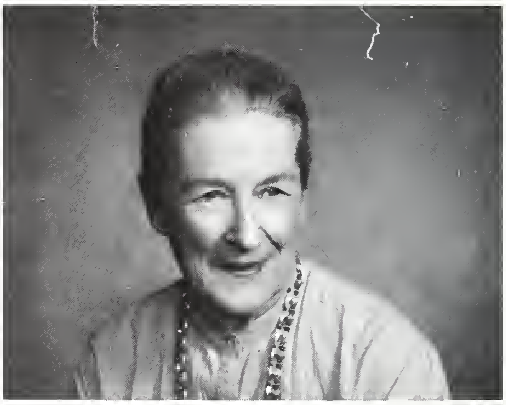

Figure 16. Dr. Katherine Stewart-Aitken, the first woman physician of the Sussex County Medical Society, now lives in Wisconsin with her physician-husband. This photograph was taken in 1986, after her retirement from full-time practice.

Dr. Stewart did not practice medicine for the next three to four years. With the call for physicians during the war, Katherine once again began to practice. She was one of a small number of physicians in the county and spent at least half of her time traveling around the county. At that time, an office call was one dollar and a house call was three dollars. Though the only female member of the county society, and one of the few physicians remaining in the state, Dr. Stewart was easily accepted by the local medical community and felt she could always count on the male physicians when necessary. She worked as a family practitioner in Sussex County until 1949.[50]

Dr. Stewart served as County Reporter for Sussex from 1947 to 1948. Her reports to the State were complete and lengthy.

She was an active participant in organized medicine, as she was a member of the American Medical Association, and a fellow of the American Board of Internal Medicine.[15]

When Dr. Stewart left New Jersey in 1949 for Madison, Wisconsin, there were 33 members in Sussex County. Dr. Stewart became affiliated with the University of Wisconsin Hospital. Both Dr. Aitken and Dr. Stewart then relocated to Eau Claire, and Dr. Stewart devoted herself to work for the developmentally disabled; she continued in this field for the next 21 years.[50]

Dr. Stewart retired from active practice in 1977. Presently, she and her husband live in Wisconsin. She does volunteer work in the intensive care unit for a local hospital. ☐

Eleanor Galt

Union County

On June 7, 1869, in the Court House in Elizabeth, 15 physicians met to create the Union County Medical Society; the physicians felt they could "organize and sustain a Society beneficial to the interests of the profession." Dr. Samuel Abernethy served as the first president of this Society.[9] Sixteen years later, the Union County Medical Society elected its first woman member, **Eleanor E. Galt, MD.**

Born in 1854 in Delaware County, New York, Eleanor Galt was the daughter of Dr. Joseph Galt, and his wife Louise.[10,51] As the child of a physician, her family had enough money to educate her privately by tutors in her southern New York State community. Eleanor attended the Woman's Medical College of Pennsylvania; the topic of her graduating thesis was, "The Absorption of Fat." And, on March 13, 1879, at noon, at Association Hall, Philadelphia, Eleanor received her medical degree along with 19 other young women (including Sophia Presley) of the 29th class of the Medical College. Dr. Clara Marshall, a professor of materia medica, was the commencement speaker; a portion of her oration was directed to their unique situation as women physicians: "Seek and take advantage of opportunities; despise no opening wedge, however small. Be baffled in no rightful undertaking, however formidable. Every circumstance comes as a helping hand, not only to the profession, but to our sex . . . [Women

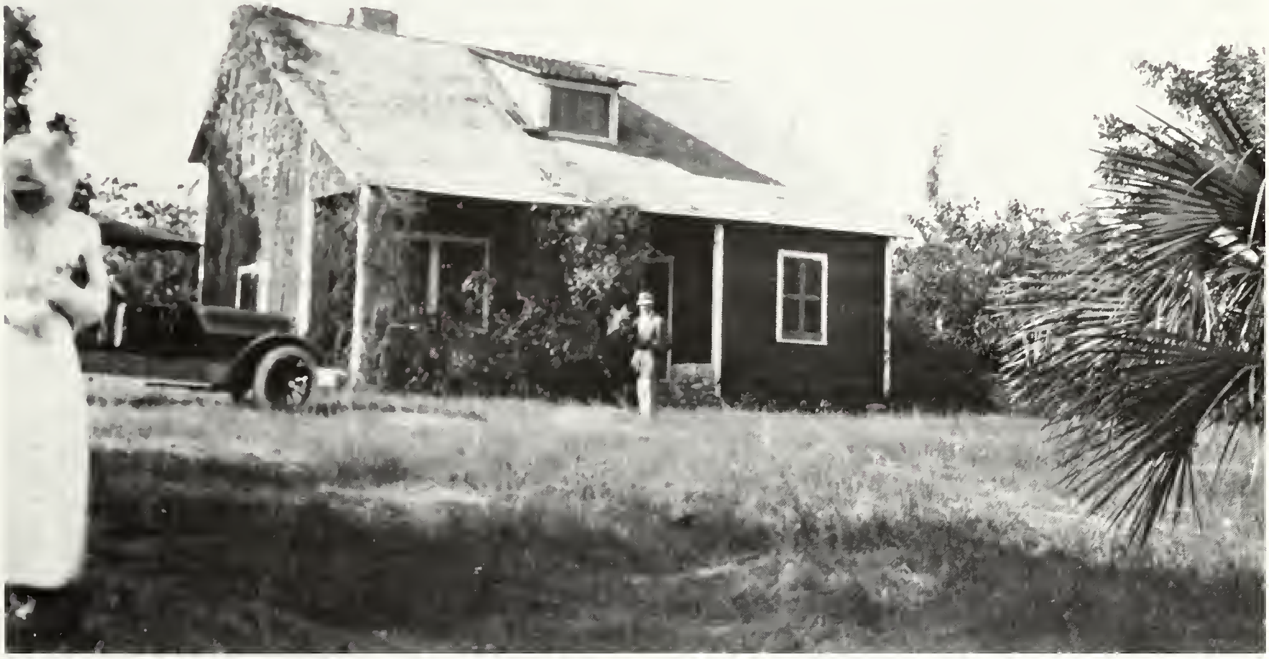

Figure 17. Dr. Eleanor Galt-Simmons, the first woman member of the Union County Medical Society, lived in Coconut Grove, Florida, in a home built around 1916. (© D.F. Muller, courtesy of Dr. William Straight.)

physicians] still carry the burden of a twofold responsibility: fidelity to a great cause and devotion to the interests of a noble profession . . . The woman of society is too often its slave. You should be wise enough and shrewd enough to make society serve you."[2]

After graduation, Dr. Galt was a First Assistant at the Nursery and Child's Hospital in New York.[51] Along with five of her classmates, Eleanor worked at the Country Branch of this Hospital in Staten Island. Founded to offer care for infants of wet nurses, the Hospital consisted of "a main hospital and a series of fresh air children's villages. The Country Branch provided adult supervision, schools, religious guidance, food, clothing, and medical care to the children it admitted."[2] Historical files record the words of Mary A. DuBois, the hospital director, "Female physicians are obliged to pass as strict examinations as men, before they graduate. With the learning and skill which so many have already exhibited, it is time that an earnest plea should be made that our Public City Institutions for women and children, should be placed under the care and guidance of women physicians."[2]

With her internship at the Nursery and Child's Hospital completed, Dr. Galt moved to 130 Jefferson Avenue in Elizabeth, where she opened a private general practice. At this time, the community had one hospital that opened in 1877; Dr. Galt was one of nine staff physicians in this 26-bed hospital.[9]

On October 8, 1884, membership for Dr. Galt was proposed, and she was elected to the Union County Medical Society on January 14, 1885. In 1885, the Union County Medical Society boasted 41 members of the 577 members of the State Society.

Seven years after she opened her medical practice, Dr. Galt married an attorney, Captain Albion R. Simmons. The 1892 records of the Medical Society of New Jersey reflected this marriage by changing the roster to read Dr. Eleanor E. Galt-Simmons. The newlyweds resided at 1150 East Jersey Avenue, Elizabeth; later that year, in November 1892, when Eleanor was 37, they moved to Coconut Grove, Florida.

Dr. Simmons remained a member of the Union County Medical Society for 11 years; she maintained her membership until 1896, even though she had moved out of state in 1892.

Captain and Mrs. Doctor Simmons, as they were known, purchased eight acres of land and built their home on the coral bedrock. This first house burned and they rebuilt a home on the same land. In addition, a small structure was built for Eleanor's office.[51]

Coconut Grove was a young, frontier community of 250 inhabitants when the newlyweds arrived; there were few physicians in this area and Dr. Simmons set up shop soon after arriving. She was well received in her new hometown. Quite unknowingly, Dr. Simmons made history again, as the first woman physician to practice in Dade County, Florida.[51] For $1, Dr. Simmons was issued an occupational license in 1894. The local newspaper, *The Miami Metropolis,* published an account of her work in 1895, that remains a part of her special history: Sam Lewis, a wounded fugitive, was in need of medical attention. After Dr. Simmons dressed the wounds of the man Sam Lewis shot, Eleanor offered her services to Sam Lewis: "She removed two bullets from his right thigh and one from his left leg, dressed his wounds and splinted the compound fracture of the leg. She refused his request for enough chloroform to put himself to sleep permanently. A few hours later, wracked with pain, thirst, and hunger, Lewis surrendered."[51]

Memoirs of townspeople record that Doctor Simmons was "a petite, blond, well-groomed person of conservative dress and manner. Her dresses came to her ankles; only her high buttoned shoes showing beneath them. She probably also wore a broad-brimmed hat. She was friendly, easy to talk to, and walked with a quick step." She made her medical rounds in a road cart drawn by a single horse driven by the Doctor or her houseboy.[51]

Simmons maintained an active practice in Florida; she also participated in community affairs, and in 1893 was elected to the Housekeeper's Club; she remained a member until her death. The Club's minutes report Dr. Galt gave lectures on health matters, including the following excerpt: "Dr. Simmons gave a talk on sanitation in the household. She traced the evolution of our sanitary ideas, and defined the noxious and dangerous elements we have to contend with. Her explanation of personal sanitation, the method of eliminating poisons from the human system, was listened to with interest. She emphasized the necessity of burning all materials connected with infectious disease."[2]

Dr. Simmons was elected to membership in the Florida Medical Association in April 1898 and in September 1903, she was a charter member of the Dade County Medical Association.

In 1899, the local newspaper reported that Doctor Simmons "is very sick with an old time trouble."[51] After this Eleanor never regained her former strength, but continued to practice as a physician for the Lake Placid School and the Adirondack-Florida School.

By November 1908, Eleanor was a widow, and she moved to Miami to be closer to her physician. She died of tuberculosis of the brain at the age of 55 on February 2, 1909.[6] *The Miami Metropolis* noted the townspeople "came in numbers" to the First Presbyterian Church of Miami to pay their respects.[51] ☐

Doreen Sheffield

Warren County

On November 8, 1825, the administrators of the Medical Society of New Jersey agreed to allow for a county society in Warren. Under the leadership of Dr. Jabez Gwinnup, ten physicians organized in February 1826, at the home of John P. Ribble. The county physicians, though, did not elect a woman member until 1950, when **Doreen R.C. Sheffield, MD,** was accepted into the organization.[9]

Doreen Rippon Corke was born in Winnipeg, Manitoba, Canada, on March 29, 1907; she had two sisters and one brother. Doreen completed her undergraduate education at Selkirk Collegiate Institute, Manitoba, in 1922, and at the University of Manitoba in 1924.[54] She received her medical degree from the University of Manitoba School of Medicine, Canada, in May 1929. School records noted she was "creditable" throughout her course work. She completed the required one-year internship at Children's and General Hospitals, Manitoba.[52]

Dr. Corke moved to Philadelphia, Pennsylvania, in 1930 after accepting a staff position at the Woman's Hospital. Soon after, she moved to New York to intern at Beekman Street Hospital until October 1931.[15] Doreen then was employed as an intern at St. Mary's Hospital for Children in 1932, and received her New York license in 1933. After that position, she was on the staff of Seaside Hospital, Staten Island, from June 1933 to September 1933 and lived in Brooklyn, New York.

In May 1945, Dr. Corke moved to Hobart, New York, and that was her address until she moved to Baltimore, Maryland, in April 1946.[15]

In 1946, Doreen married William H. Sheffield; they had one child, Anne. The following year, the Sheffields moved to Oxford, New Jersey, and in 1948 Doreen was awarded her New Jersey license.[15]

The 34 members of the Warren County Medical Society accepted Dr. Sheffield's application for membership, and she was listed as a member from 1950 until 1953. The Warren County Reporter did not list her name as delivering papers or attending any county society meetings.

In addition to her membership with the Medical Society, Dr. Sheffield was a member of the American Medical Association; she maintained her membership until 1961.

Dr. Sheffield moved again in 1954, to Plainfield, and in 1956, she moved to Rumson; in 1957, her address was listed as Ridgewood but she noted "she was no longer in practice."[15]

On February 2, 1959, Dr. Sheffield reported to the AMA her move to Cooperstown, New York. She died of cancer on December 6, 1961.[15,52] ☐

Conclusion

Twenty physicians redefined the social and professional roles of 19th and 20th century women in New Jersey. These pioneers were "comfortable with the idea of studying medicine,"[2] and they were good at it. They integrated their chosen field of medicine and the real world, for they "had a special concern for family and preventive medicine."[2]

It was a long tough fight: "The regular medical professional objected on many levels to the entrance of woman into its ranks. In the first place, the vast majority of doctors were traditionalists who subscribed to the cult of domesticity with the same intense tenacity as their nonmedical brethren. . . . Other physicians cited woman's inferior intellect, her passivity of mind, her physical weakness, and her tendency toward hysteria. . . . More subtle and more insidious was the feat that an influx of women would alter the image of the profession by feminizing it in an unacceptable way."[2]

Yet, these 20 women and others like them persevered. They found their places in medicine and medicine found places for them. What is most impressive is that these women accomplished so much. They were universally accepted in their New Jersey communities by patients and eventually were accepted by male colleagues. Only one woman's nomination into a county society was the cause of discussion, and only one county reporter even mentioned the fact that a woman finally had been admitted into a county medical society.[53-57]

These biographical materials prove that these women, knowingly or unknowingly, furthered the cause of equal rights. Quietly and unassumingly, 20 women physicians in New Jersey made history. ■

References

1. *The Woman's Book, Volume 1.* New York, NY, Charles Scribner's Sons, 1894, pp. 48-51.

2. Abram RJ: *Women Doctors in America, 1835-1920: Send Us a Lady Physician.* New York, NY, W.W. Norton & Company, 1985.

3. Marks G, Beatty WK: *Women in White.* New York, NY, Charles Scribner's Sons, 1972.

4. Annual Report of the New York Infirmary: The First Hundred Years. New York, NY, 1954, pp. 19-26.

5. Lovejoy EP: *Women Doctors of the World.* New York, NY, MacMillan Co., 1957.

6. *Transactions of the Annual Meetings of the Alumnae Association of the Woman's Medical College of Pennsylvania* (Simmons, 1909; Hallowell, 1910; Smith, 1920; Marsh, 1921; Haines, 1924; Clement, 1925).

7. Personal communication: U. Berkley Ellis, executive director, Montgomery County Medical Society, September 11, 1989.

8. *Transactions,* State Medical Society of Kansas, 1872, pp. 166-167.

9. Medical Society of New Jersey: *Transactions and The Journal of the Medical Society of New Jersey,* 1776-1956. Trenton, NJ.

10. Brodman Index: New Jersey Women Physicians, 1886-1982. March 1989. UMDNJ-George F. Smith Library, Newark.

11. Heston AM: Absegami: Annuals of Eyren Haven and Atlantic City, 1609-1904, p. 232.

12. Rogers F, Sayre AR: *The Healing Art.* Trenton, NJ, Medical Society of New Jersey, 1966.

13. The First Hundred Years of the Bergen County Medical Society, 1854-1954.

14. Van Horn A: Van Horn Family of Bergen County, 1657-1927.

15. AMA Records and Archives. Chicago, IL, 1989.

16. Personal correspondence, Mrs. Jean Baber, Philadelphia, PA.

17. Obituary, Carrie Helen Van Horne, MD, personal papers, Dr. Felix H. Vaun, UMDNJ-George F. Smith Library, Newark.

18. Last will and testament, Caroline H. Van Horne, January 20, 1914.

19. 1910 Federal Census, Metzer Family.

20. Personal correspondence, Patricia Ann Metzer, November 10, 1989.

21. *Biographical Review: Sketches of Leading Citizens of Burlington and Camden Counties.* Boston, MA, Biographic Review Publishing Co., 1947, pp. 169-170.

22. Teffeau C: Sophia Presley, MD: The spinster who struggled seven years against bias of male doctors. *Bull Camden Cty His Soc,* May 1985, pp. 37-45.

23. Stevens LT: History of Cape May County, New Jersey. Cape May City, NJ, 1897, p. 397.

24. Way J: Medical men of early times in Cape May. *Cape May County Magazine History Genealogy* 1:1-17, 1934.

25. Butler MF: Minutes of the '49 Annual Meeting, Woman's Medical College of Pennsylvania, pp. 14-15.

26. Meeker ER: *New Jersey: Historical, Commercial, and Industrial Review.* Elizabeth, NJ, Commonwealth Publishing Co., 1906.

27. Superintendent's Report: Home of the Feeble-Minded, 1889 and 1901.

28. Fairault MN: Training and Treatment of the Feeble-Minded and of the Epileptic. *Journal of Psycho-Asthenics,* 1899, p. 203.

29. Stone FS: Racine, Belle City of the Lakes. S.J. Clarke Publishing Co., Chicago, IL, 1916, pp. 248-249.

30. *Newark Evening News,* 1924.

31. *Gloucester County Democrat,* January 29, 1925, Woodbury, NJ.

32. Correspondence, Milly Riley, 1989. UMDNJ-George F. Smith Library, Newark.

33. Personal communication, Mrs. Clark, December 11, 1989.

34. University of Buffalo Medical School Archives, 1929.

35. Mercer County Medical Society, Trenton, NJ, 1914.

36. Acton JN: Bradway Families. Salem, NJ, Salem County Historical Society, 1978.

37. Personal communication, Johns Hopkins Medical School, 1989.

38. Protestant Missions, 1924, P.F. Mission Society.

39. Personal communication, Cambria County Medical Society, Mr. Michael Kohler, October 1989.

40. *Asbury Park Journal,* October 20, 1903; October 30, 1903, p. 1.

41. *City Directories,* Paterson, NJ, 1875-1886.

42. Thron LE, Clark GA: Greater Paterson.

43. *Ononadagan 1902.* Syracuse University, Syracuse, NY, 1902.

44. Dr. Marie Louise Chard. *Women's Medical Journal,* New York Academy of Medicine, New York, NY. April 1938, pp. 114-115.

45. The death of Dr. Ellen B. Smith. *The Salem Standard,* May 19, 1920.

46. Biographical, Genealogical, and Descriptive History of the First Congressional District of New Jersey, Volume II. Lewis Publishing Company, New York, NY, 1900, pp. 566-567.

47. Personal communication, Evelyn G. Van der Veer, September 22, 1989.

48. Women who pioneered. *Somerset Press Newspaper,* September 8, 1988.

49. Sanford ME: A history of the medical staff at Somerset Hospital. Somerset Medical Center, January 1989.

50. Personal communication, Dr. Katherine E.S. Aitken, December 1989.

51. Straight WM: The lady doctor of the grove. *J Florida Med Assoc* 56:615-621, 1969.

52. Personal communication, Dr. Audrey M. Kerr, University of Manitoba, August 28, 1989.

53. Morantz-Sanchez RM: *Sympathy and Science.* New York, NY, Oxford University Press, 1985.

54. Walsh MR: *Doctors Wanted: No Women Need Apply.* New Haven, CT, Yale University Press, 1977.

55. Cowen D: *Medicine and Health in New Jersey.* Princeton, NJ, Van Nostrand Co., 1964.

56. Morantz RM, Pomerleau CS: *In Her Own Words,* GP, Westport, CT, 1982.

57. Levin BS: *Women and Medicine.* Metuchen, NJ, Scarecrow Press, 1980.

HOUSING APPLICATION

224th ANNUAL MEETING
MEDICAL SOCIETY OF NEW JERSEY
MAY 6-9, 1990

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THE SANDS HOTEL, CASINO & COUNTRY CLUB (Headquarters Hotel)
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☐ SINGLE **$75.00** ☐ One-Bedroom Suite **$225.00** ☐ Two-Bedroom Suite **$300.00**

☐ DOUBLE **$75.00 (Reservations must be received prior to April 6, 1990)**

Check-out time is 12 Noon. Rooms may not be available for check-in until after 3 p.m. Check-in time on Sundays is 6 p.m. FORTY-EIGHT (48) HOURS NOTICE OF CANCELLATION is required for a full refund.

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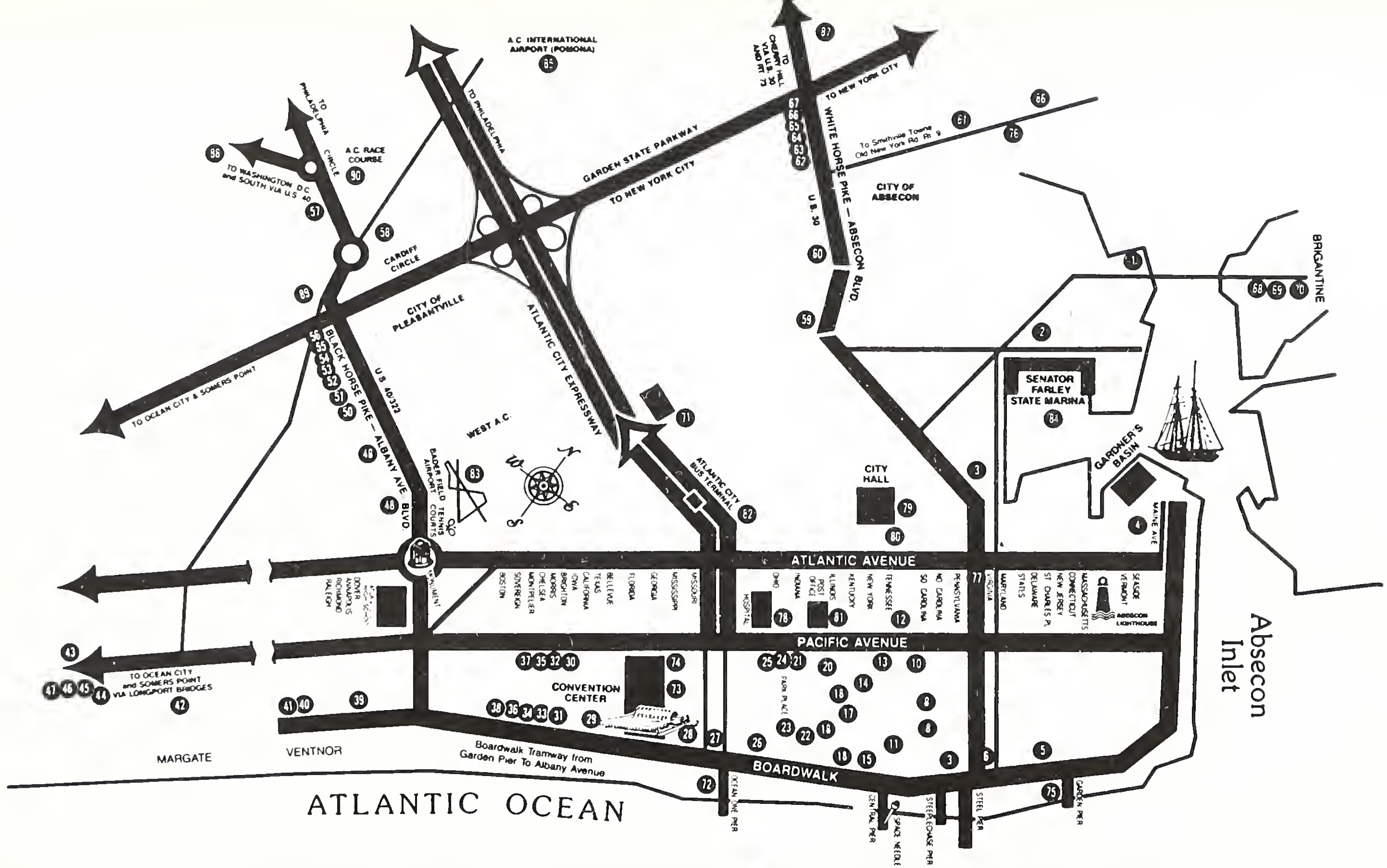
☐ DOUBLE **$75.00 (Reservations must be received prior to April 5, 1990)**

Check-out time is 12 Noon. Rooms may not be available for check-in until after 3 p.m. Check-in time on Sundays is 6 p.m. FORTY-EIGHT (48) HOURS NOTICE OF CANCELLATION is required for a full refund.

PARKING: FREE PARKING TO REGISTERED GUESTS. One car per room.

☐ Check if Official Delegate County ______________________



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1. Harrah's Marina
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5. Showboat
6. Trump Taj Mahal*
7. Resorts International
8. Barbizon-Catalina
9. Carolina Crest
10. Quality Inn
11. Trinidad
12. Fiesta
13. Envoy
14. Econo Lodge Boardwalk
15. Atlantic Palace**
16. La Renaissance**
17. Casino Beach
18. Madison House
19. Continental
20. Bala
21. Midtown Motor Inn
22. Sands
23. Claridge
24. Best Western—Atlantic City
25. Royal Inn
26. Bally's Park Place
27. Caesars Atlantic City
28. Trump Plaza
29. Atlantis
30. Ascot
31. TropWorld
32. Dunes
33. Days Inn—Atlantic City
34. Diplomat
35. International
36. Ocean Club**
37. El Greco
38. Bally's Grand
39. Enclave Suite Resort**
40. Oceanaire (Ventnor)
41. Mayfair By-The-Sea (Ventnor)
42. White Sands (Margate)
43. Residence Inn (Somers Point)
44. Impala Motel (Ocean City)
45. Santa Barbara (Ocean City)
46. Port-O-Call (Ocean City)
47. Crossings Motor Inn (Ocean City)
48. Airport Motor Inn
49. Best Western Inn at Golf & Tennis World
50. Comfort Inn—West Atlantic City
51. Hampton Inn West
52. Pleasantville Motor Inn
53. Sheraton Inn
54. Comfort Inn Victorian
55. Whittier Inn
56. Days Inn—Pleasantville
57. Inn of the Dove (Cardiff)
58. Red Carpet Inn (Cardiff)
59. Howard Johnson Hotel
60. Comfort Inn North
61. Marriott's Seaview Golf Resort
62. Travel Lodge
63. Econo Lodge
64. Budget Host Inn
65. Hampton Inn Hotel
66. Days Inn Absecon
67. Travel Inn
68. Islander (Brigantine)
69. La Sammana (Brigantine)
70. The Sea Gull (Brigantine)
71. Atlantic City Rail Terminal and Site Of New Convention Center
72. Shops On Ocean One
73. Atlantic City Convention Center
74. Atlantic City Convention & Visitors Bureau
75. Atlantic City Art Center
76. Natl. Wildlife Refuge & Noyes Museum
77. Gordon's Alley Shops
78. Hospital
79. City Hall
80. Public Library
81. Post Office
82. Bus Station
83. Bader Field Airport
84. Sen. Frank S. Farley State Marina
85. Atlantic City International Airport
86. Historic Smithville & Village Greene
87. Renault Winery
88. Historic Wheaton Village
89. Shore Mall/Boscovs
90. Atlantic City Race Course & Hamilton Mall/Macy's

*Under construction/Casino Hotel Pending, N.J. Licensure
**Condo

NOTEBOOK

TRUSTEES' REPORT

A regular meeting of the Board of Trustees was held on January 21, 1990, at Society headquarters. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Report of the President . . .
(1) Membership Recruitment . . . Congratulated Ocean County Medical Society on the success of their recruitment efforts.
(2) Physicians' Health Program . . . Encouraged county societies to invite Dr. Canavan, medical director of the program, to meetings.
(3) Meeting of County Medical Society Executives . . . Commented on the following: the "Capitol Commentary" mailing; direct mailings to members when there is a need; suggestion that leadership conference be held twice a year; development of a system in which MSNJ would perform the billing function for counties; need for format by which MSNJ can respond directly to requests for membership; and advice on computer purchasing for county societies.
(4) Pennsylvania Blue Shield Medicare Program . . . Noted that Mr. Joseph Lucci is available to discuss Medicare management with county societies.
(5) JEMPAC . . . Expressed appreciation for the 100 percent support of JEMPAC by Board members and the AMA delegation, and requested all county societies urge executive members to join JEMPAC. Also, approved the slate of JEMPAC officers proposed by the Nominating Committee:

Harry M. Carnes, MD
  Chairman
Gabriel F. Sciallis, MD
  Vice-Chairman
Edward A. Schauer, MD
  Secretary
Bartholomew R. D'Ascoli, MD
  Treasurer
Joseph A. Riggs, MD
  Member-at-Large
William E. Ryan, MD
  Member-at-Large

(6) Governor's Insurance Plan . . . Noted Mr. Maressa's explanation that Governor Florio instructed his staff to develop a proposal to abolish the Joint Underwriters Association (JUA); the Society already has instituted action in opposition.
(7) AMA Hospital Medical Staff Section . . . Endorsed the candidacy of Doctor Robert J. Weierman as a candidate for secretary of the AMA Hospital Medical Staff Section.
(8) Portrait Gallery for Fellows . . . Approved the concept of providing an appropriate area of the headquarters building to exhibit portraits of past presidents.
(9) AMA Leadership Conference . . . Noted that Doctors Costabile, Ryan, Formica, Franzoni, Carnes, Ratner, and Restivo are assigned to attend the conference; Drs. Blome, Iacuzzo, and Redo, young physicians, were invited to go, as well as Edith Goldie, student member of the Board.
(10) Medicare Provider 800 Line . . . Noted that the 800 line will be continued.
(11) NJ Academy of Physicians . . . Congratulated Dr. Ralph J. Fioretti on being named physician of the year by the Academy.
(12) NJ Association of Medical Specialty Societies . . . Congratulated Dr. George Neumair as president of the Association.
(13) State Department of Health . . . Noted that Leah Z. Ziskin, MD, is the acting commissioner of health and a member of MSNJ.
(14) Medicare Reimbursement on Unassigned Claims . . . Noted that the AMA delegation will be requested to develop an appropriate resolution for introduction to the AMA expressing the Society's objection to the new requirement imposed on physicians under the Medicare law. Also, agreed to send a letter to New Jersey congressmen concerning the

224th ANNUAL MEETING MEDICAL SOCIETY OF NEW JERSEY

May 6-9, 1990

The Sands Hotel, Casino & Country Club
Atlantic City

Claridge Casino Hotel
Atlantic City

objection of physicians to the new Medicare law requiring them to complete and mail insurance forms to the carrier for Medicare patients, and the possible effect it could have in limited accessibility to care for some patients.

Report of Executive Director . . . (1) MSNJ Paid Membership . . . Noted paid membership to be 7,438; and Mr. Maressa will prepare demographic information on the membership for a future meeting.
(2) Legislation . . . Noted the revised medical waste registration fee schedule:

Less than 50 lbs. per year .	$100
50 to 200 lbs. per year	$300
Over 200-300 lbs. per year .	$500
Over 300-1,000 lbs. per year	$1000
Over 1,000 lbs. per year ...	$3500

Also, noted that an attempt will be made through litigation to reach a negotiated compromise with the Department of Environmental Protection whereby a physician with multiple office sites would be considered as one registrant, regardless of the number of sites, and the aggregated amount of waste would determine the fee. And, noted S-2936 (medical licensing reform) and S-3867 represent victories for MSNJ, and the issue of membership recruitment intensification was referred to the Council on Public Relations.
(3) Litigation . . . Noted the following: Jasper Jackson is the acting commissioner of insurance; Kenneth Merin was appointed to the State Commission of Investigation; briefs for the appeal were filed and accepted in the case of MSNJ and the State Board of Physical Therapy; and active argument in the case of PRO versus MSNJ appears likely in June 1990.
(4) Pronouncement of Death . . . Asked members to review the reproposal Rule N.J.A.C. 13:35-6.1, Pronouncement of Death, and mail comments to the executive director.

UMDNJ Report . . . Heard comments on the following from Stanley S. Bergen, Jr, MD: candidacy of Doctor W. Douglas Skelton, provost for medical affairs and dean of Mercer University School of Medicine, Macon, Georgia, for the AMA Section on Medical Schools; University Day on January 24, 1990; appointments of Michael S. Katz to the National Advisory Committee on Student Financial Assistance, Doctor Eric Munoz to the Prospective Payment Assessment Commission, and Doctor Dominick DePaola as dean of all United States dental schools; importance of strategic planning; slight increase in medical school applications; and MSNJ support of the Foundation.

State Board of Medical Examiners . . . Heard comments on the following from Michael B. Grossman, DO . . . surgical assistant rule; Board of Chiropractic Examiners will go into effect on February 10; reproposed pronouncement of death rule establishing a working definition of "attending physician" and clear-cut guidelines for moving the body; availability of speaker's bureau; complexity of S-2936; reopening of search for medical director; and position that postoperative care, in general, is the duty of the surgeon, and to give responsibility for that care to a health care provider not equally trained is inappropriate.

NJ Hospital Association . . . Heard comments on the following from Louis Scibetta: Blue Cross/Blue Shield rates; mortality data from the Health Care Financing Administration; and the fact that Medicare payments have not kept pace with hospital expenditures.

Committee on Medicaid . . . Approved the following:

That the Medical Society of New Jersey seek reasonable reimbursement for physicians under the Medicaid program.

Committee on Membership Services . . . Noted that the Peer Review Organization Defense Plan will be explained in an upcoming issue of *NEW JERSEY MEDICINE.*

Task Force on Uncompensated Care for Physicians . . . Approved the following:

That the Task Force be renamed the Task Force on Patient Care for the Under-Insured.

Committee on Utilization Review . . . Carried the following amended recommendation:

That a questionnaire be sent to a computer selected sample of 1,000 members of MSNJ, who in their normal practice, admit patients to the hospital.

New Business . . . Noted that the Nominating Committee met in an all-day session on January 17, 1990, and interviewed candidates for all elected positions. ☐

UMDNJ NOTES

The University of Medicine and Dentistry of New Jersey (UMDNJ) is expanding its southern New Jersey urban and community affairs effort with a new division to serve Camden, Stratford, Atlantic City, and other urban areas. Thomas R. Jones is director of urban and community relations for this region. He will be developing programs to strengthen ties between UMDNJ and southern New Jersey residents, businesses, and municipalities.

The National Institutes of Health (NIH) has awarded a five-year $2.6 million grant to Dr. Sarah Schefer to continue her research on two rare, often fatal, diseases that cause atherosclerosis. Dr. Schefer, professor of medicine at UMDNJ-New Jersey Medical School, is studying inherited defects in the body's ability to turn excess cholesterol into bile acids, that are used in digestion. The defects cause lipid storage diseases that can be so severe a teenage victim's arteries can look like those of an 80-year-old. While the diseases are rare, affecting only about 300 people worldwide, Dr. Schefer's research could lead to better treatment for atherosclerosis and other cholesterol-related ailments that affect a broad population.

New Jersey's first comprehensive urinary incontinence treatment program has been opened at the Center for Aging at UMDNJ-School of Osteopathic Medicine, Stratford. The program is one of a few nationally that treats incontinence with the help of computers, exercise, and diet, and, when necessary, drugs and surgery.

UMDNJ-New Jersey Dental School staff are researching the possibility that advanced tooth and gum disease may be an early warning sign of AIDS. Dr. Patricia Murray, associate professor of periodontics, is studying drug-abuse patients who have AIDS and are receiving dental care in the school's Special Services Clinic. In similar studies at the University of California at San Francisco School of Dentistry, Dr. Murray found at least 30 percent of the homosexual HIV-positive patients had advanced periodontal disease. The type of periodontal disease found in HIV-positive patients is different from that found in the general population because it is a faster moving condition, generally accompanied by oral lesions on the mouth within the first two weeks. If left untreated, periodontal disease can lead to infection that could prove fatal to AIDS patients whose immune systems have been damaged by the disease. Symptoms of advanced periodontal disease include chronic pain originating from the jaw, exaggerated gum recession, and bone disintegration, resulting in teeth loss. Dr. Murray found that by removing the dead tissue, and irrigating the gums with antiseptics and antibiotics, infection can be eliminated. ☐ Stanley S. Bergen, Jr, MD

1990 MSNJ ANNUAL MEETING

Saturday, May 5, 1990

3:30 p.m.	Board of Trustees' Meeting
7:00 p.m.	Officers' Cocktail Reception and Dinner

Sunday, May 6, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
10:00 a.m.	Educational Program
11:00 a.m.	Exhibits Open
1:00 p.m.	House of Delegates
3:30 p.m.	Reference Committee Meetings

Monday, May 7, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates (Election)
12:00 noon	Golden Merit Award Ceremony and Reception
1:00 p.m.	Professional Liability Program (MIIENJ)
2:45 p.m.	Reference Committee Meetings
5:00 p.m.	JEMPAC Political Forum
5:45 p.m.	JEMPAC Wine and Cheese Reception
6:30 p.m.	Somerset County Medical Society

Tuesday, May 8, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates
1:30 p.m.	House of Delegates
2:00 p.m.	Exhibits Close
6:30 p.m.	Inaugural Reception and Dinner

Wednesday, May 9, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	General Session
1:00 p.m.	Board of Trustees' Meeting

MSNJ AUXILIARY

AMA Auxiliary Leadership Confluence II, held in Chicago last month, drew 300 county presidents-elect, national officers and committee members, and state presidents and presidents-elect. The three-day intensive learning conference, designed to train auxiliary leaders at all levels of the organization, included plenary sessions on managing auxiliaries, training leaders, and exploring health issues.

Those attending from New Jersey gave Confluence rave reviews. They were particularly impressed with the quality of the events: the expert speakers, the specific nature of the topics discussed, and the broad spectrum of material presented. Consultation sessions focused on how to appoint committees, how to plan projects and programs, how to budget, and how to establish yearly goals. AMA and auxiliary representatives also highlighted cooperative efforts between the medical societies and auxiliaries. A special session dealt with the problem of impairment and well-being within the medical community. In addition, the directors of the AMA Division of Legislative Activities and the AMA Department of Congressional Affairs gave updates on legislative issues.

Finally, a wide range of adolescent health issues was explored, including the merits of anti-drug programs in educating and treating teens and approaches appropriate in teaching young people refusal skills. Also on the agenda were breakout sessions on teenage pregnancy, suicide, alcohol addiction, and HIV/AIDS. A representative of the AMA Youth HIV Education Project suggested ways for involvement in the AMA project.

For MSNJA participants, the success of Confluence was due not only to the plethora of information, but to the stimulating encounters with other knowledgeable and enthusiastic physicians' spouses. Most importantly, the meetings acted as catalysts for renewing commitments to support projects and charities that both improve the lives of people in the community and enhance the public's image of medicine and the medical family. ☐ Marion H. Geib

ERRATA

The first sentence in the final paragraph of the article entitled, "Cutaneous Malignant Melanoma," by Drs. Nwiloh, Sussman, Tambouret, and Dardik (February 1990) was incorrect. The paragraph should read: The results of treatment of advanced MM remains dismal, with limited palliation obtained from chemotherapy, radiotherapy, immunotherapy, and hormonal therapy. In this series from Englewood Hospital, mean survival for stages II and III was 12.5 and 1.5 months, respectively. ☐

PLACEMENT FILE

The following physicians have written to the Executive Offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physicians. If you are interested in any further information, we suggest you make inquiries directly to them.

CARDIOLOGY

Fredric Gerewitz, MD, 125 Montgomery Ave., Bala Cynwyd, PA 19004. SUNY-Downstate 1984. Board eligible. Group or partnership. Available July 1990.

GASTROENTEROLOGY

Eric Avezzano, MD, 2510 B.S. Walter Reed Dr., Arlington, VA 22206. SUNY-Stony Brook 1985. Board certified (IM); board eligible (GI). Group, partnership, solo. Available July 1990.

GENERAL PRACTICE

Leonid Belopolsky, MD, 955 Chanticleer Dr., Cherry Hill, NJ 08003. Moscow 1961. Board certified (ANES). Available.

Randi Silverbrook, DO, 3024 Wistar Ct., Bensalem, PA 19020. College of Osteopathic Medicine 1985. Partnership or group. July 1990.

INTERNAL MEDICINE

David D. Gross, MD, 1045 Liberty St., Apt. 1, Trenton, NJ 08611. St. George's University (Grenada) 1987. Board eligible. Available August 1990.

Suresh Reddy, MD, 3301 Cobblestone Circ., #6, Waterloo, IA 50703. Kakatiya (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

Himanshu Shah, MD, 71 Louis St., New Brunswick, NJ 08901. UMDNJ 1988. Part-time position. Available.

NUCLEAR MEDICINE

Robert W. Cifers, MD, 26 Somers Ave., Seaville, NJ 08230. Ohio State 1983. Board eligible. Available.

PATHOLOGY

Ruth Kreitzer-Richards, MD, 5470 Mosholu Ave., Riverdale, NY 10471. Guadalajara 1983. Board certified. Available July 1990.

Judith Vople, MD, 106 Orlando Blvd., Toms River, NJ 08757. UMDNJ 1985. Board eligible. Group or hospital-based. Available July 1990.

ARE YOU MOVING?

If so, please send a change of address to *NEW JERSEY MEDICINE*, Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648, at least six weeks before you move.

Name ______________________________

Old Address ______________________________

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New Address ______________________________

City ____________________ State __________ Zip __________

Hahnemann University

Department of Medicine

WEDNESDAYS GRAND ROUNDS
8:30 A.M.-9:30 A.M.
March-May 1990

MARCH 1990

March 7, 1990

IMMUNE INTERVENTION IN TYPE I DIABETES MELLITUS
Jay S. Skyler, M.D.
Professor of Medicine
Director, Diabetes Mellitus
University of Miami
Miami, FL

March 14, 1990

COPD: PATHOGENESIS AND TREATMENT ADVANCES
Mark J. Utell, M.D.
Professor of Medicine and Toxicology
University of Rochester
Rochester, NY

March 21, 1990

CLINICAL PHARMACOLOGY
Vincent J. Zarro, M.D., Ph.D.
Associate Professor of Pharmacology & Medicine
Director, Division of Clinical Pharmacology
Hahnemann University

March 28, 1990

DERMATOLOGIC TREATMENT WITH RETINOIDS AND CYCLOSPORINE
Richard L. Spielvogel, M.D.
Professor of Medicine and Dermatology
Director, Division of Dermatology
Hahnemann University

APRIL 1990

April 4, 1990

CARDIAC ELECTROPHYSIOLOGY: EVOLVING DIAGNOSTIC AND THERAPEUTIC MODALITIES
John D. Fisher, M.D.
Professor of Medicine
Director, Cardiac Arrhythmia Service
Acting Director, Division of Cardiology
Montefiore Medical Center
New York, NY

April 11, 1990

MEDICAL MANAGEMENT OF GALLSTONE DISEASE
Hans Fromm, M.D.
Professor of Medicine
Director, Division of Gastroenterology
The George Washington University
Washington, DC

April 18, 1990

ENDOCRINOLOGY AND METABOLISM: RECENT ADVANCES
Leslie I. Rose, M.D.
Professor of Medicine
Director, Division of Endocrinology and Metabolism
Hahnemann University
Jeffrey L. Miller, M.D.
Associate Professor of Medicine
Division of Endocrinology and Metabolism
Hahnemann University

April 25, 1990

PROSTHETIC VALVE ENDOCARDITIS
William E. Dismukes, M.D.
Professor & Vice Chairman for Educational Programs
Department of Medicine
University of Alabama
Birmingham, AL

MAY 1990

May 2, 1990

VENOUS THROMBOEMBOLIC DISORDERS: UPDATE 1990
John C. Hoak, M.D.
Director, Division of Blood Diseases and Resources
National Heart, Lung and Blood Institute
National Institutes of Health
Bethesda, MD

May 9, 1990

IMMUNE MECHANISMS: BREAKTHROUGHS IN IMMUNOSUPPRESSION
George H. Hitchings, Jr., Ph.D., D.Sc.
Nobel Prize Winner 1988 in Medicine and Physiology
Duke University
Durham, NC
Adjunct Professor of Pharmacology
University of North Carolina
Chapel Hill, NC
Scientist Emeritus
Burroughs Wellcome Co.
Terry Strom, M.D.
Professor of Medicine
Harvard Medical School
Director of Clinical Immunology
Beth Israel Hospital
Boston, MA

May 16, 1990

INFECTIOUS DISEASES: NEWEST ADVANCES
Abdolghader Molavi, M.D.
Associate Professor of Medicine & Surgery
Director, Division of Infectious Diseases
Hahnemann University

May 23, 1990

"NEW FASHION" CLINICAL PATHOLOGIC CONFERENCE
Kenneth Cohen, M.D.
Associate Professor of Medicine
Director, Internal Medicine Residency Program
Hahnemann University

May 30, 1990

"OLD FASHION" CLINICAL PATHOLOGIC CONFERENCE
Eugene Coodley, M.D.
Professor of Medicine
University of California, Irvine
Director of Geriatric Medicine
Longbeach VA Hospital
Longbeach, CA

WEDNESDAYS MEDICAL SEMINAR SERIES
8:30 A.M.-3:00 P.M.

MARCH 28, 1990
Cyclosporine and Systemic Retinoids: Therapeutic Options
GUEST FACULTY
Cynthia A. Guzzo, M.D.
Assistant Professor of Dermatology
Univ. of Pennsylvania, Dept. of Pathology
Philadelphia, PA
Henry H. Roenigk, Jr., M.D.
Professor of Dermatology
Chairman, Dept. of Dermatology
Northwestern Univ., Chicago, IL
HAHNEMANN UNIVERSITY FACULTY
Gary R. Kantor, M.D.
Richard L. Spielvogel, M.D. (Course Director)
Eric C. Vonderheid, M.D.

APRIL 25, 1990
Infectious Diseases: Treatment of Difficulty and Opportunistic Fungal Infections
GUEST FACULTY
William E. Dismukes, M.D.
Professor and Vice-Chairman
Department of Medicine
Univ. of Alabama School of Medicine
David J. Drutz, M.D.
Adjunct Professor of Medicine
Univ. of Pennsylvania School of Medicine
Adjunct Professor of Microbiology & Immunology
Temple University Medical School
Thomas J. Walsh, M.D.
National Cancer Institute
National Institutes of Health
HAHNEMANN UNIVERSITY FACULTY
Emily A. Blumberg, M.D.
Abdolghader Molavi, M.D. (Course Director)
Craig A. Wood, M.D.

MAY 9, 1990
The Age of Immunosuppressive Therapy and Organ Transplantation
GUEST FACULTY
George H. Hitchings, Jr., Ph.D., D.Sc.
Nobel Laureate, 1988, Medicine and Physiology
Adjunct Professor of Pharmacology & Experimental Medicine
Duke University
Adjunct Professor of Pharmacology
University of North Carolina
Scientist Emeritus, Burroughs Wellcome Co.
Terry Strom, M.D.
Professor of Medicine
Harvard Medical School
Director of Clinical Immunology
Beth Israel Hospital
President
American Society of Immunology
HAHNEMANN UNIVERSITY FACULTY
Joseph H. Brazin, M.D.
Isadore Brodsky, M.D.
Robert Chvala, M.D.
Farokh Samini, M.D.
Allan B. Schwartz, M.D. (Course Director)

Presented by:
William S. Frankl, M.D.
Professor of Medicine and Chairman
Department of Medicine
Allan B. Schwartz, M.D.
Professor of Medicine and
Director, Continuing Medical Education
Department of Medicine

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ALLERGY

May

7- **Immunology and the Visual**
8 **System**
8 A.M.-5 P.M.—Bally's Grand Hotel, Atlantic City
(UMDNJ)

ANESTHESIOLOGY

May

15 **Meeting**
6-9 P.M.—Ramada Inn, Clark
(New Jersey State Society of Anesthesiologists)

CARDIOLOGY

April

4 **Esophageal Causes of Chest Pain**
1:30-2:30 P.M.—Rutgers Community Health Plan, New Brunswick
(Rutgers Community Health Plan)

18 **Silent Ischemia**
1:30-2:30 P.M.—Rutgers Community Health Plan, New Brunswick
(RCHP)

DERMATOLOGY

April

18 **Robert Wood Johnson Medical School Dermatological Conferences**
6-9 P.M.—Rutgers Community Health Plan, US #1, New Brunswick
(UMDNJ)

May

16 **Robert Wood Johnson Medical School Dermatological Conferences**
6-9 P.M.—Rutgers Community Health Plan, US #1, New Brunswick
(UMDNJ)

24 **Update on Superficial Fungal Infections**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

INFECTIOUS DISEASE

April

4 **Counseling and Testing for HIV Infection**
11:30 A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ and NJDOH)

20 **Clinical Management of HIV Infection**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(AMNJ and NJDOH)

21 **Common Infections**
8:30-9:30 A.M.—Memorial Hospital of Salem County, Salem
(Memorial Hospital)

May

2 **Lyme Disease**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ and NJDOH)

9 **Proper Use of Antibiotics**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ and NJDOH)

22 **Clinical Management of HIV Infection**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ and NJDOH)

30 **Lyme Disease**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ and NJDOH)

MEDICINE

April

3 **Fourth Annual Internal**
17 **Medicine and Board Review**
24 5:30-6:30 P.M.—Cooper Hospital, Camden
(Cooper Hospital/UMDNJ)

4 **Living Wills**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

4 **Medical Lecture Series**
11 10:30-11:30 A.M.—Christ
18 Hospital, Jersey City
25 *(Christ Hospital)*

4 **Internal Medicine**
11 **Review Course**
18 4-7 P.M.—University Hospital,
25 New Brunswick
(AMNJ and UMDNJ)

4 **Review Course in Internal**
18 **Medicine**
25 11 A.M.-1 P.M.—Bayonne Hospital, Bayonne
(Bayonne Hospital)

5 **Growth Factor**
19 **Molecular Mechanisms Series**
26 4-6 P.M.—Coriell Institute for Medical Research, Camden
(Coriell Institute)

5 **Immunology**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

6 **Burns**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

6 **Continuing Medical**
13 **Education Program**
20 12 Noon-1 P.M.—South Jersey
27 Hospital System, Bridgeton
(South Jersey Hospital System)

6 **Alcohol and Drug Dependencies**
8:30 A.M.-4:15 P.M.—Holiday Inn, Jamesburg
(New Beginnings)

10 **Renal Biopsy Conferences**
12:30-2 P.M.—Barnert Memorial Hospital Center, Paterson
(Barnert Memorial Hospital Center)

11 **Dialogues in Critical Medical Decisions**
7:30-9 P.M.—Englewood Hospital, Englewood
(Englewood Hospital)

11 **Prescription Drug Abuse**
7-9 P.M.—The Still Restaurant, Andover
(Hackettstown Community Hospital)

11 **Prevention of Lower Extremity Amputations**
9-10 A.M.—Somerset Medical Center, Somerville
(AMNJ and NJDOH)

12 **Advances in Fetal Medicine**
7:45-9 P.M.—Memorial Hospital of Burlington County, Mount Holly

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Moderator
Bernard L. Segal, M.D.

3:00-3:30	Hypertrophic cardiomyopathy: differential diagnosis	*Bernard L. Segal, M.D.*
3:30-4:00	The treatment of hypertrophic cardiomyopathy	*Steven J. Nierenberg, M.D.*
4:00-5:00	Case presentations—Unusual forms of hypertrophic cardiomyopathy	*T. John Mercuro, M.D.*
	Panel discussion *Terry Langer, M.D., J. David Ogilby, M.D., Henry S. Sawin, M.D., Gary J. Vigilante, M.D.*	

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(Burlington County Medical Society)

12 **Update on Geriatric Medicine**
26 4:30-6:30 P.M.—Cooper Hospital, Camden
(Cooper Hospital/UMDNJ)

17 **Unresolved Problems in Acute Renal Failure**
6:30-9:30 P.M.—Overlook Hospital, Summit
(AMNJ)

18 **Fluid and Electrolyte Disorders**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

18 **Amputee Rehabilitation and Prevention**
2-3 P.M.—John E. Runnells Hospital of Union County, Berkeley Heights
(AMNJ)

19 **Nephropathy**
2-3 P.M.—Woodbridge Developmental Center, Woodbridge
(AMNJ)

19 **Nicholas G. Demy Memorial Lecture**
5-6 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center)

19 **Diabetic Nephropathy**
2-3 P.M.—Woodbridge Developmental Center, Woodbridge
(AMNJ)

20 **Prevention of Lower Extremity Amputations**
8:30-9:30 A.M.—Chilton Memorial Hospital, Pompton Plains
(AMNJ and NJDOH)

21 **MIIENJ Seminar**
All Day—MSNJ headquarters, Lawrenceville
(MIIENJ)

24 **Impaired Professional**
7:30-8:30 A.M.—Mercer Medical Center, Trenton
(Mercer Medical Center)

25 **Prevention of Lower Extremity Amputations**
1:30-2:30 P.M.—Trenton Psychiatric Hospital, Trenton
(AMNJ and NJDOH)

26- **Clinical Prevention of Lyme**
27 **Disease**
All Day—Robert Wood Johnson Medical School, Piscataway
(NJ Public Health Association and UMDNJ)

27 **Diabetes in Pregnancy**
8:30-9:30 A.M.—Chilton Memorial Hospital, Pompton Plains
(AMNJ and NJDOH)

27 **Developmental Disabilities Journal Club for Physicians and Dentists**
11:30 A.M.-12:30 P.M.—Hunterdon Developmental Center, Clinton
(Hunterdon Developmental Center)

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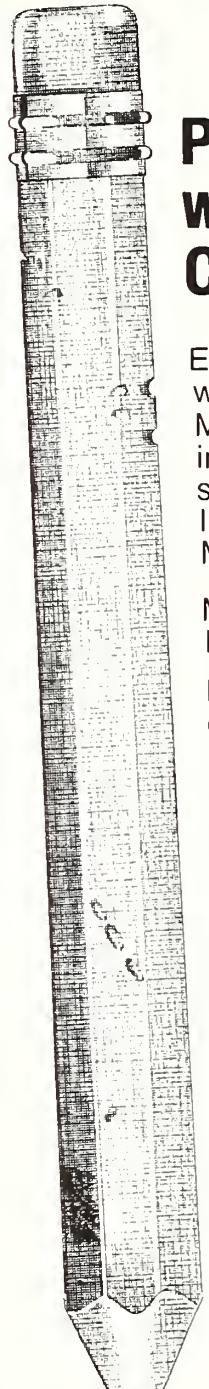

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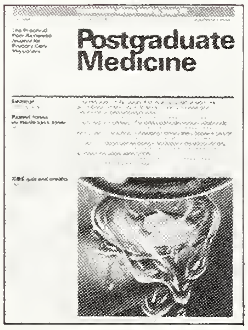

May

1 **Aspiration Syndrome in the**
Mentally Retarded
1-2 P.M.—Woodbridge
Developmental Center
(AMNJ)

1 **Fourth Annual Internal**
8 **Medicine Update and**
15 **Board Review**
22 5:30-7:30 P.M.—Cooper Hospital,
29 Camden
(Cooper Hospital/UMDNJ)

2 **Medical Lecture Series**
9 10:30-11:30 A.M.—Christ
16 Hospital, Jersey City
23 *(Christ Hospital)*
30

2 **Internal Medicine Review**
9 **Course**
16 4-7 P.M.—University Hospital,
23 New Brunswick
(AMNJ and UMDNJ)

3 **Computers in Medicine**
1:30-2:30 P.M.—Essex County
Hospital Center, Cedar Grove
(AMNJ)

3 **Liver Transplantation**
11 A.M.—St. Joseph's Hospital
and Medical Center, Paterson
(St. Joseph's Hospital and
Medical Center)

4- **Combined Annual Meeting**
5 Cherry Hill Inn, Cherry Hill
(New Jersey Society of
Pathologists and PA Association
of Clinical Pathologists)

4 **Continuing Medical**
11 **Education Program**
18 12 Noon-1 P.M.—South Jersey
25 Hospital System, Bridgeton
(South Jersey Hospital System)

8 **Renal Biopsy Conferences**
12:30-2 P.M.—Barnert Memorial
Hospital Center, Paterson
(Barnert Memorial Hospital
Center)

9 **Medical Malpractice: Criminal**
Law and Tort Issues
10:30-11:30 A.M.—Christ
Hospital, Jersey City
(AMNJ)

10 **Diabetes-Related**
Kidney Disease
1:30-2:30 P.M.—Vineland
Developmental Center, Vineland
(AMNJ and NJDOH)

10 **Update on Geriatric Medicine**
24 4:30-6:30 P.M.—Cooper Hospital,
Camden
(Cooper Hospital/UMDNJ)

11 **New Laboratory Diagnostic**
Tests
12 Noon-1 P.M.—South Jersey
Hospital System, Bridgeton
(South Jersey Hospital System)

14 **Retinopathy**
1-2 P.M.—New Lisbon
Developmental Center,
New Lisbon
(AMNJ)

15 **Volume Homeostatis in**
Pregnancy
6:30-9:30 P.M.—Overlook
Hospital, Overlook
(AMNJ)

16 **Nutritional Assessment**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

16 **Dilemmas of Dying**
10:30-11:30 A.M.—Christ
Hospital, Jersey City
(AMNJ)

17 **Continuing Medical Education**
12 Noon—Somerset Medical
Center, Somerville
(Somerset Medical Center)

18 **Retinopathy**
12 Noon-1 P.M.—South Jersey
Hospital System, Bridgeton
(AMNJ)

18 **Rheumatoid Arthritis: Etiology**
and Pathogenesis
12:15-1:15 P.M.—Kennedy
Memorial Hospital, Stratford
(UMDNJ and Kennedy Memorial
Hospital)

19 **Morbidity and Mortality**
26 **Conference**
8:30-10 A.M.—New Jersey
Medical School, Newark
(UMDNJ)

23 **Functional Assessment**
of the Elderly
10:30-11:30 A.M.—Christ
Hospital, Jersey City
(AMNJ)

24 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas
Medical Center, Livingston
(Saint Barnabas Medical Center)

ONCOLOGY

April

11 **Tumor Board Conference**
12 Noon-1 P.M.—Memorial
Hospital of Salem County, Salem
(Memorial Hospital of Salem
County)

13 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley
Hospital Center, Sussex
(Wallkill Valley Hospital Center)

26 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb
Medical Center, Vineland
(Newcomb Medical Center)

26 **Dinner Meeting**
6:30-9:30 P.M.—The Hyatt,
New Brunswick
(AMNJ—Head and Neck
Oncology Section)

May

9 **Tumor Board Conference**
12 Noon-1 P.M.—Memorial
Hospital of Salem County, Salem
(Memorial Hospital of Salem
County)

11 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley
Hospital Center, Sussex
(Wallkill Valley Hospital Center)

16 **First Annual Joint Meeting**
6:30-9:30 A.M.—The Manor,
West Orange
(Head and Neck Oncology and
Radiation Oncology Sections—
AMNJ)

24 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb
Medical Center, Vineland
(Newcomb Medical Center)

ORTHOPEDICS

April

17- **Annual Spring Meeting**
22 Royal Antiqua Hotel, Antiqua
(New Jersey Orthopaedic Society)

PEDIATRICS

April

5 **Pediatric Grand Rounds**
12 8:30-9:30 A.M.—Robert Wood
19 Johnson Medical School, MEB,
26 102, New Brunswick
(UMDNJ)

11 **Learning Disabilities**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

18 **Neonatal Resuscitation and**
Stabilization
7:30 A.M.-5:15 P.M.—New Jersey
Medical School, Newark
(UMDNJ)

19 **Update in Aspects of Pediatrics**
Marriott Hotel, Saddle Brook
(Northern NJ Pediatric Society)

19 **Pediatric Seizures**
6:30-7:30 P.M.—Marriott Hotel,
Saddle Brook
(Northern New Jersey Pediatric
Society)

May

3 **Pediatric Grand Rounds**
10 8:30-9:30 A.M.—Robert Wood
17 Johnson Medical School, MEB,
24 102, New Brunswick
(UMDNJ)

4 **Sudden Infant Death**
12 Noon-1 P.M.—South Jersey
Hospital System, Bridgeton
(South Jersey Hospital System)

JUNE 16

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PSYCHIATRY

April

3 **Divorce**
8:30-10 A.M.—Department of Psychiatry, Elizabeth General Hospital, Elizabeth
(Elizabeth General Hospital)

5 **Case Seminars To Improve**
19 **Psychotherapeutic Technique**
8-10 P.M.—2 West Northfield Road, Livingston
(Advanced Psychiatric Study Group)

5 **Alzheimer's Disease**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

10 **Grand Rounds**
17 8:30-10 A.M.—Department of Psychiatry, Elizabeth General Hospital, Elizabeth
(Elizabeth General Hospital)

12 **Genetics for the Clinical Psychiatrist**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

18 **Psychiatry and the Law**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

19 **Psychiatric Illness: It's in the Family**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

24 **Couples Therapy**
8:30-10 A.M.—Elizabeth General Hospital, Elizabeth
(Elizabeth General Hospital)

25 **Nutrition Effects**
All Day—Carrier Foundation
(Carrier Foundation)

25 **Grand Rounds**
2:30-4 P.M.—Ancora Psychiatric Hospital, Hammonton
(Ancora Psychiatric Hospital)

May

1 **Psychiatry Grand Rounds**
8 8:30-10 A.M.—Elizabeth General
15 Medical Center, Elizabeth
22 *(Elizabeth General Medical*
29 *Center)*

3 **Case Seminars To Improve**
17 **Psychotherapeutic Technique**
8-10 P.M.—2 West Northfield Road, Livingston
(Advanced Psychiatric Study Group)

3 **PICA Syndrome and Psychiatry**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

10 **The Use of Video in Psychiatric Treatment**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

23 **High Anxiety**
All day—Carrier Foundation, Belle Mead
(Carrier Foundation)

24 **Narcolepsy**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

31 **The Borderline Personality in the Hospital Setting**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

RADIOLOGY

April

19 **1989-1990 Scientific Meeting**
7:30-9:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of New Jersey-Diagnostic Section, AMNJ)

26 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center)

May

14 **Ultrasound**
7-8 P.M.—Wallkill Valley General Hospital, Sussex
(AMNJ)

17 **1989-1990 Scientific Meeting**
7:30-9:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of New Jersey-Diagnostic Section, AMNJ)

24 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center)

SURGERY AND ITS SPECIALTIES

April

1 **Surgical Treatment of Cardiothoracic Disease**
10-11 A.M.—New Jersey Medical School, MSB, 506B, Newark
(UMDNJ)

3 **Weekly Vascular Case**
10 **Conference**
17 7:30-8:30 A.M.—Robert Wood
24 Johnson Medical School, MEB, 108B, New Brunswick
(UMDNJ)

7 **Surgical Treatment of Cardiothoracic Disease**
10-11:30 A.M.—New Jersey Medical School, 506B, Newark
(UMDNJ)

21 **Morbidity and Mortality**
28 **Conference**
8:30-10 A.M.—New Jersey Medical School, MSB, 506B, Newark
(UMDNJ)

23 **Plastic and Reconstructive Surgery**
12 Noon-1 P.M.—Hospital Center at Orange
(AMNJ)

24 **Englewood Surgical Society Lecture Series**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society)

25 **Journal Club, Section of Cardiothoracic Surgery**
6:30-9:30 P.M.—2 Mountain Ridge Drive, Livingston
(UMDNJ)

May

1 **Weekly Vascular Case**
8 **Conference**
15 7:30-8:30 A.M.—Robert Wood
22 Johnson Medical School, MEB,
29 108B, New Brunswick
(UMDNJ)

6 **Surgical Treatment of Cardiothoracic Disease**
10-11 A.M.—New Jersey Medical School, MSB, 506B, Newark
(UMDNJ)

10- **Fourth Annual Meeting**
13 Sheraton Boston Hotel and Towers, Boston
(Eastern Vascular Society)

26 **Englewood Surgical Society Lecture Series**
8-10 P.M.—Englewood Club, Englewood
(Englewood Surgical Society)

26 **Morbidity and Mortality Conference**
8:30-10 A.M.—New Jersey Medical School, MSB, 506B, Newark
(UMDNJ)

UROLOGY

April

6 **Urology Grand Rounds**
13 New Jersey Medical School,
20 MSB, C600, Newark
27 *(UMDNJ)*

18 **Annual William P. Burpeau Award Dinner and Lecture**
6 P.M.—The Manor, West Orange
(AMNJ)

May

4 **Urology Grand Rounds**
11 New Jersey Medical School,
18 MSB, C600, Newark
25 *(UMDNJ)*

IN MEMORIAM

Anthony J. Balsamo. At the age of 79, Anthony John Balsamo, MD, died on November 29, 1989. Born in New York City, Dr. Balsamo was awarded his medical degree from Hahnemann Medical School, Pennsylvania, in 1938; the following year, he received his license to practice in New Jersey. A urologist, Dr. Balsamo was the director of the Department of Urology at Bayonne Hospital, and served as a consultant in his specialty at St. Mary's Hospital, Hoboken. In addition, he was an adjunct professor of urology at the New York Polyclinic Medical School and Hospital. A member of our Hudson County component and of the American Medical Association, Dr. Balsamo was a fellow of the American College of Surgeons and of the American Urological Association.

Jules E. Baime. At the age of 79, Jules Edgar Baime, MD, died on December 12, 1989. A retired pediatrician for the past five years, Dr. Baime was a member of our Essex County component and of the American Medical Association. Born in Newark in 1910, Dr. Baime earned his medical degree from the Ecclesiastical Medical School, Ohio, in 1936. Dr. Baime was the founder of the outpatient pediatric clinic at Newark Beth Israel Medical Center and also served as medical director for the Daughters of Israel Geriatric Center, West Orange, from 1978 to 1985. During his career, Dr. Baime was affiliated with East Orange General Hospital, The Hospital Center at Orange, Newark Beth Israel Medical Center, and Saint Barnabas Medical Center, Livingston. During World War II, Dr. Baime served in the U.S. Air Force from 1942 to 1946.

Sigmund J. Clayman. We have been notified of the death of Sigmund Jonas Clayman, MD, a member of our Middlesex County component. Born in 1908 in New York City, Dr. Clayman was awarded his medical degree in 1936 from the University of Zurich Medical School, Switzerland. A dermatologist, Dr. Clayman was a diplomate of the American Board of Dermatology and a fellow of the American College of Dermatology. During his career, Dr. Clayman was associated with Perth Amboy General Hospital, and Bellevue Medical Center, New York. He served as a major in the United States Army from 1941 to 1947.

Jules Cooper. Word has been received of the death of Jules Cooper, MD, a retired member of our Cape May County component. Born in 1905, Dr. Cooper received his medical degree from the University of Maryland School of Medicine in 1934. Upon completion of his residency in Colorado, Dr. Cooper relocated to Woodbine where he practiced as a general physician for more than 50 years. During his lengthy career, Dr. Cooper was former medical director of Woodbine Developmental School and was affiliated with Shore Memorial Hospital, Somers Point, and Burdette Tomlin Memorial Hospital, Cape May Court House. Dr. Cooper also will be remembered as a founder and instrumental force behind the Woodbine Ambulance Corps and purchaser of its first ambulance. In 1984, Dr. Cooper was recognized by MSNJ and was awarded the Golden Merit Award for his years of service to the medical community. Dr. Cooper served as an officer in his county society, and was a member of the American Medical Association and of the Toastmasters Club of Atlantic City. He served as a captain in the United States Army from 1942 to 1943.

James Monaghan. A member of our Essex County component, James Matthew Monaghan, MD, died on November 29, 1989. Born in 1926, Dr. Monaghan earned his medical degree from Jefferson Medical College, Pennsylvania, in 1950. He completed an internship at Jefferson Hospital, and served a fellowship in radiology at Columbia Presbyterian Hospital, New York City. At the time of his death, Dr. Monaghan was a retired radiologist, past-president of the medical and dental staff, and past trustee of the Hospital Center at Orange. In addition, Dr. Monaghan was past chairman of the Radiologic Technology Board of Examiners, and past-president of the Radiologic Society of New Jersey. Dr. Monaghan was a diplomate of the American Board of Radiology and a fellow of the American College of Radiology. During World War II and the Korean conflict, Dr. Monaghan served in the Army.

Arthur G. Murphy. Word has been received of the death on April 8, 1989 of a retired member of our Essex County Medical Society.

Born in 1914 in Brooklyn, New York, Arthur Gordon Murphy, MD, received his medical degree from Cornell Medical School, New York, in 1940. After serving in the United States Medical Corps from 1941 to 1945, Dr. Murphy was awarded his license to practice in New Jersey. An obstetrician-gynecologist, Dr. Murphy was affiliated with The Mountainside Hospital, Montclair, during his lengthy career. A member of the American Medical Association, Dr. Murphy was a fellow of the American College of Obstetricians and Gynecologists.

Sushila B. Patel. A member of our Middlesex County component, Sushila B. Patel, MD, died on December 6, 1989. Born in 1934 in India, Dr. Patel earned her medical degree at Baroda Medical School, India, in 1963. After serving an internship at Orange Memorial Hospital and a fellowship at Middlesex General Hospital, New Brunswick, Dr. Patel received her license to practice in New Jersey in 1973. An obstetrician-gynecologist, Dr. Patel was affiliated with J.F. Kennedy Medical Center, Edison, and Rahway Hospital. Dr. Patel was a member of the American Medical Association and a diplomate of the American Board of Obstetrics and Gynecology.

Daniel W. Popenoe. At the untimely age of 39, Daniel Ward Popenoe, MD, died on December 14, 1989. Born in California, in 1950, Dr. Popenoe earned his medical degree at the University of Southern California, Los Angeles, in 1980. He served a residency at SUNY-Downstate, New York, and a fellowship in hematology/oncology at Columbia University, New York. He received his New Jersey medical license in 1986. Affiliated with The Valley Hospital, Ridgewood, Dr. Popenoe was a member of our Bergen County component and of the American Society of Clinical Oncology. Dr. Popenoe retired from his Ho-Ho-Kus practice in internal medicine, oncology, and hematology shortly before his death.

Walter Stewart. At the age of 90, Walter Stewart, MD, a member of our Atlantic County component, died on November 28, 1989. Born in Atlantic City, Dr. Stewart received his medical degree from Johns Hopkins University Medical School, Maryland, in 1923. Awarded his license to practice in New Jersey in 1925, Dr. Stewart was a pediatrician in his hometown from 1926 to 1983, serving as chief of pediatrics at Atlantic City Medical Center from 1927 to 1959. In 1932, Dr. Stewart was the recipient of the Citizen of the Year Award for his service during a polio epidemic. In 1976, Dr. Stewart was honored with the Medical Society of New Jersey's Golden Merit Award for 50 years of service to his community. Dr. Stewart served as medical director of Florence Crittenton Home in Atlantic City, medical director at Children's Seashore House, and physician for the Friends School. Dr. Stewart was a charter member of the American Academy of Pediatricians, and was a member of the AMA.

Edward H. Weiser. Family practitioner Edward Harry Weiser, MD, a member of our Sussex County component, died on December 1, 1989, after a short illness. Born in Brooklyn, New York, in 1907, Dr. Weiser was awarded his medical degree from the Colorado Medical School in 1938; five years later, he received his license to practice in New Jersey. For the next 50 years, Dr. Weiser served as a physician in Sussex Borough at the Wallkill Valley Hospital, and as physician to the Borough Police Department, the High Point Regional High School, and the Sussex-Wantage Regional Schools. In addition, he was Sussex County coroner. Dr. Weiser was a United States World War II Army veteran, a past-president of the New Jersey Association of Family Practicing Physicians, a member of the American Medical Association, and a former chief of staff at the former Alexander Linn and Franklin Hospital.

David C. Wilson. An emeritus member of our Morris County component, David Cole Wilson, Jr, MD, died on October 7, 1989. Born in 1924 in Clifton Springs, New York, Dr. Wilson earned his medical degree at the University of Virginia Medical School in 1947. He served as a captain in the United States Army until 1952; he received his New Jersey license in October 1952 and was affiliated with Morristown Memorial Hospital. A psychiatrist, Dr. Wilson limited his practice to psychotherapy. Dr. Wilson was a member of the AMA and of the American Psychiatric Association.

IN MEMORIAM

Please send all information for member obituaries to the following address:

Membership Department
NEW JERSEY MEDICINE
Two Princess Road
Lawrenceville, NJ 08648

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Content. The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports; review articles; clinical notes; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and opinions. Editorials are prepared by the editor and by guest contributors on timely and relevant subjects. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevant to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made to an audience in New Jersey.

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1. Goldwyn RM: Subcutaneous mastectomy. *NJ MED* 74:1050-1052, 1977.
2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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NEWSWATCH

BOARD AUTHORIZES SUIT TO CHALLENGE NO-FAULT BAN ON BALANCE BILLING AND NEW LICENSURE TAX

The Florio Administration, maintaining dominant procedural and substantive control of the New Jersey Legislature, enacted a revision of the no-fault law for automobile insurance.

The new law provides for a medical fee schedule that would pay completely 75 percent of the doctors in the state; places a ban on billing in excess of the schedule; and taxes each physician $100 per year to help offset the $3 billion deficit of the Automobile Joint Underwriters Association.

MSNJ efforts to oppose the ban on balance billing and the license tax were thwarted by the Governor's control of the political process.

At its meeting on March 18, 1990, the MSNJ Board of Trustees authorized the firm of Kern Augustine Conroy & Isele to file a suit on behalf of the membership, attacking the constitutionality of the ban on balance billing and the license fee tax.

MALPRACTICE SURCHARGE

The MSNJ request for a stay on the malpractice surcharge collection was denied by both the Insurance Department and the Appellate Division. It has been appealed to the State Supreme Court but a ruling has not been rendered. The primary litigation remains in the Appellate Division and is being scheduled for hearing in early June 1990. Herbert Stern, representing MSNJ and its members, has requested the Court to schedule the case at an earlier date if possible.

MSNJ NEWSLETTER

INAUGURAL RECEPTION

The Union County Medical Society and the Medical Society of New Jersey invite you to celebrate the inauguration of Douglas M. Costabile, MD, as president of the Medical Society of New Jersey, at a gala inaugural reception and dinner dance. This social event will be held on Tuesday, May 8, 1990, at the Sands Hotel, Casino & Country Club, Atlantic City. The reception will begin at 6:30 P.M. in the International Ballroom; tickets will be $10 per person. The dinner dance will start at 7:30 P.M. in the Copa Room; tickets will be $50 per person. To reserve tickets, contact the Union County Medical Society.

AMA-HMSS

The American Medical Association Hospital Medical Staff Section (HMSS) will hold its 15th Assembly Meeting from June 21 to 25, 1990, at the Chicago Marriott Hotel. Highlights from the meeting will include an educational program entitled, "Building Effective Hospital Physician Relationships: Ten Success Stories"; presentation by the AMA-HMSS Governing Council of reports on medical staff issues including the impact of hospital bankruptcy, the role of hospital governing boards in professional review, and information sharing among medical staff; recommendation of policy to the House of Delegates; and elections for positions of chairman, vice-chairman, secretary, and a member-at-large. For information about the New Jersey Hospital Medical Staff Section, please call Diana Gore, at MSNJ headquarters, 609/896-1766.

LEGAL NOTES

Each month there are a number of frantic calls from physicians who have received notification from the PRO that they have been assessed "points" for mismanagement of patients. The first questions asked are: What do these points mean? What can you do about them?

Points are assessed by the PRO based upon its determination that a physician has mismanaged the care of a patient. The greater the effect of the mismanagement, the greater the number of points. For example, "mismanagement without the potential for adverse effects on the patient" results in the imposition of 1 point. Five points are imposed for "mismanagement with the potential for significant adverse effects on the patient" and 25 points are imposed for "mismanagement with significant adverse effects on the patient."

Thus, the number of points has nothing to do with the degree of mismanagement, but is determined solely upon the actual harm, if any, to the patient.

Associated with this point system are sanctions. Accumulate 5 points and you will receive notification that a problem exists. Obtain 10 points and you will be required to complete continuing education. Fifteen points will result in intensified review, which is a potentially serious sanction since someone will be looking over your shoulder for perhaps three to six months watching every test you order and every word you write in a chart. The accumulation of 20 points can result in prepayment or preadmission or preprocedure reviews, or referral to a hospital committee for action. Finally, receipt of 25 points—obtainable by one single management failure that adversely affects a patient—may result in a recommendation by the PRO Sanctions Committee to revoke your privileges to treat Medicare patients and referral to the State Board of Medical Examiners for action on your medical license.

Unfortunately, the PRO takes the position that the fact that points are assessed does not entitle you to a hearing or any other type of due process. Rather, the PRO insists it is using the point system solely for "internal tracking." Thus, unless they also decide to initiate sanctions, such as suspension from the Medicare program, they tell us the doctor has no right to challenge the assessment of points.

Since the assessment of points is not subject to challenge, it is imperative that the physician's initial response to a PRO inquiry be full, complete, accurate, and understandable. This may be the only opportunity the physician has to maintain a clean record. Before responding, the hospital chart must be reviewed carefully. If any question exists concerning the appropriateness of care, have a colleague offer suggestions. Then, prepare an initial draft response. The response should specifically address the item or items targeted by the PRO. Ordinarily, it should not contain a full-blown description of the entire case. Before submitting the response, contact your health care attorney for review. If you are a member of the Medical Society of New Jersey Endorsed PRO Defense Program, contact Kern Augustine Conroy & Isele. You already have paid for this legal advice—take advantage of it. There will be no additional cost to you for this service.

Depending upon the questions asked, it may be appropriate to also supply statements by consultants, family members, hospital personnel, or experts in the field. On occasion, use of authoritative journal articles, textbooks, or treatises should be included.

You will have no further opportunity, ordinarily, to state your case unless the PRO seeks to impose sanctions. At that point, the burden falls upon you to prove to the PRO that its decision was wrong. It is much easier to provide full information at this stage than to try to convince the PRO it was wrong at a later time.

Any correspondence received from the PRO must be viewed as a potentially serious event. Your response should be clear, concise, factual, and medically and legally correct, and should address each of the concerns raised by the PRO. Where appropriate, include backup materials supporting your position. ☐ Kern Augustine Conroy & Isele, P.A.

NAMES PROJECT

The New Jersey NAMES Project AIDS Memorial Quilt will be on display at Rutgers' Louis Brown Athletic Center, Piscataway, on April 21 to 23; Rutgers' Gold Dome, Newark, on May 18 to 20; Brookdale Community College, Lincroft, on June 1 to 3; and Convention Hall Ballroom, Atlantic City, on June 8 to 10. The Quilt, which began as a memorial, has become one of the nation's most valuable tools for promoting a compassionate and educational dialogue about AIDS. The Quilt provides a clear message: human beings die of AIDS.

FUN/FRUSTRATION RATIO OF MEDICAL EDUCATION

Just when you've had it up to your ears with acronyms dealing with the regulation of medicine, you rediscover the excitement of the practice of medicine. Part of that excitement is the astonishing rate of change of the medical knowledge base. The corollary to this information explosion is the challenge to manage it competently with respect to new therapeutic and diagnostic aids in the care of patients. Ours is a profession of lifelong learners; this contributes to our drive and vitality and to making medicine fun. However, fun is hardly the word that comes to mind, when after a long day, you eyeball a stack of unopened journals.

In 1989, the physician has a number of tools to increase the "fun/frustration" ratio in the continuing learning process. The most obvious is the microcomputer, an affordable and powerful manipulator of information. Careful selection of the software and databases now available can lead to relevant and efficient learning. Collaborations between computer scientists and physicians are producing programs that can assist in diagnosis and treatment and also educate the user in the reasoning behind the computer-generated recommendations. Other examples are continuing medical education programs and access to the databases of the National Library of Medicine.

Retaining clinically relevant information with any modality is less likely to stick if the subject is not related to patient care or at least a written case. Medical educators refer to this as problem-based learning and the concept is as applicable to practicing physicians as it is to medical students and residents. The human interaction with patients and the resolution of real clinical problems are the basis of lessons we remember. How often can we make that claim, despite the beauty of the conference site, for continuing medical education lectures?

The discipline of clinical epidemiology has contributed practical and efficient methods to assist physicians in self-education. Guidelines for efficiently reading medical journals, criteria for assessing the validity and applicability of clinical evidence, new ways to look at the clinical significance of studies, and more rigorous evaluations of diagnostic tests are some of the important advances in this field. Decision analysis is another area of clinical epidemiology which has received much attention recently. Still growing as a discipline to resolve clinical questions in a practical manner, decision analysis is a powerful tool in clinical education. Its strength lies in making the elements of a clinical decision explicit; forcing the learner to explore all options and consider quality of evidence.

You do not have to become a computer programmer, a clinical epidemiologist, or decision analyst to reap the benefits of these educational tools. Beginning with this issue, these tools will be incorporated into discussions of interesting cases seen at UMDNJ (page 305). This problem-based medical education series will familiarize readers with educational tools used at New Jersey Medical School in an effort to produce lifelong learners. We sincerely hope it will improve the "fun/frustration" ratio of your continuing education. ☐ Howard A. Holtz, MD

HOMELESS AWARENESS

The Young Physicians Committee of the Medical Society of New Jersey and the Young Lawyers Division of the New Jersey State Bar Association will be presenting the "First Annual Homeless Awareness Conference." This program is being held on May 11, 1990, at the New Jersey Law Center, New Brunswick, from 9 A.M. to 4:45 P.M. The objective of the program is to heighten public awareness of the homelessness crisis and to train professionals in the areas of care required by homeless individuals. The cost for the all-day program is $20, and for further information, contact Ron Rouse at 609/896-1766.

RESTRUCTURING UNCOMPENSATED CARE

The Federation's executive board unanimously adopted a resolution that charges the uncompensated care system unfairly subsidizes employers that do not provide health insurance to workers at the expense of employers that do. AFL-CIO President Charles Marciante stated that under the current system, anyone who pays a hospital bill through an insurance premium or out of pocket shares in the cost of uncompensated care and subsidizes those who cannot afford or refuse to purchase health insurance. Uncompensated care is reimbursed to hospitals by means of a uniform surcharge. The resolution indicated that 11 percent of the population, or 850,000 people, lack health insurance. And, 41 percent of the uninsured hold jobs and between 35 to 40 percent are dependents of workers, according to Marciante. The resolution also indicated that most new businesses in New Jersey are in service or retail industries, that traditionally do not provide health insurance coverage. AFL-CIO leaders called on lawmakers to consider establishing mandated health insurance or tax programs similar to those enacted in Massachusetts and Hawaii. Senate President John Lynch (D-Middlesex) has endorsed the recommendation.

REPORTING AIDS

The Camden County Borough has been found liable in federal court because employees circulated information that a resident was infected with the AIDS virus. U.S. District Court Judge Stanley S. Brotman ruled against a police officer and Runnemede for violating the right of privacy of the family of a man inflicted with the disease. The situation occurred when a police officer told a neighbor of a man arrested for unlawful possession of a needle that the man was HIV-positive. The suit alleged that as a result of the police officer's disclosure, the family suffered harassment, discrimination, and humiliation.

BRAIN DEATH BILL

A bill that would legislatively recognize the concept of "brain death" is set to go before the full state Senate for a vote. The bill permits a person to be declared dead if breathing and circulation are maintained solely by machine and the patient has sustained irreversible cessation of all functions of the entire brain. The bill also provides an exception to this definition of death if it violates a patient's religious beliefs or moral convictions. In these cases, a person could be declared dead if the heartbeat and breathing had irreversibly stopped. The acceptance of the brain death definition is an important factor in the area of organ transplantation. MSNJ is objecting to the religious exemption provision.

NEW JERSEY AND AIDS

Although the count is not finished, an additional 1,791 AIDS cases were reported in New Jersey in 1989. The state has been counting cases since 1981 and the total is expected to increase from 6,146 to more than 7,937 when the 1989 count is completed, according to the State Department of Health. More than 4,900 New Jerseyans have died of AIDS since 1981 and about 30 percent of those diagnosed last year already have died.

NURSING HOME REIMBURSEMENTS

Nursing home industry leaders argue that New Jersey's low rate of reimbursing nursing homes for Medicaid residents violates federal law and accounts for half of the facilities' $10 loss per patient day. If the problem was to be corrected, it could cost $36 million in its first full budget year. The State Department of Human Services was petitioned to live up to its federally mandated obligations by two nursing home groups, representing 32,000 residents in 352 facilities.

HEART TRANSPLANT CENTER

The state's only heart-transplant center was unveiled late last month at Newark Beth Israel Medical Center. In addition to the service, a new state-of-the-art coronary care unit (CCU) and a new neonatal intensive care unit (NICU) were opened. According to the Hospital, the new 24-bed CCU makes it the largest cardiac surgical program in the state.

HCFA PHYSICIAN FEE TARGET

HCFA announced the "Performance Standard" target of 9.1 percent for physician fee increases in fiscal year 1990. If fees exceed this amount, the physician fee increases for 1992 might be reduced. Secretary of

Health and Human Services, Louis Sullivan, MD, believes physicians, as a result, will determine what services are necessary and those that are inappropriate or ineffective will be eliminated. Many question whether that will occur with a system that will not impact the physicians for some two years down the road.

SUMMER RESEARCH FELLOWSHIP

The M. Louise Carpenter Gloeckner, MD, Summer Research Fellowship Award Committee of the Archives and Special Collections on Women in Medicine, The Medical College of Pennsylvania, is accepting applications for summer 1990 research using materials in the Archives and Special Collections at the College. The Archives houses the business and academic records of The Medical College of Pennsylvania dating from its founding in 1850 as the Female Medical College of Pennsylvania. Two grants of up to $1,500 each for four to six weeks of research. For an application and description of the Fellowship, contact the Archives and Special Collections on Women in Medicine, The College of Pennsylvania, 3300 Henry Avenue, Philadelphia, PA 19129.

INSURANCE REFORMS

The state Industrial Union Council (IUC) recently indicated limited support for Governor Jim Florio's auto insurance reform package. The section IUC reserved judgment on was a proposal to transfer the cost and coverage for personal injury protection (PIP) to health insurance carriers. The labor commissioner urged the leadership of IUC to consider the control of health care costs as the number one issue that must be faced because that is "the number one item out of control in New Jersey." According to IUC, "Most strikes now occur over who should shoulder any rise in medical costs." Meanwhile, the AFL-CIO announced "enthusiastic support" for the auto insurance package. This was after an independent study indicated the move would mean only a 1 to 2 percent or $20 to $40 annual increase per person in health insurance costs. Blue Cross/Blue Shield of New Jersey has estimated the cost to be $100 annually.

KICKBACK CASE SETTLED

The Inspector General's Office has reached a settlement with SmithKline Beecham Clinical Laboratories regarding referrals by physicians of Medicare and Medicaid business to three California laboratories owned by such physicians and managed by SmithKline. SmithKline said it settled "to avoid the cost of litigation and disruption" to their business and that it was not "admission of liability in any way."

HOSPITALS SUE ON MEDICAID

The United States Supreme Court heard oral arguments recently on a case that may determine whether hospitals can sue states in federal courts for inadequate Medicaid payments. The case involves the first of many suits under the Boren Amendment, a 1981 federal law requiring states to pay the cost of Medicaid patients served by economically and efficiently operated hospitals. The basis for the first suit, involving the Virginia Hospital Association and the state of Virginia, is that the state Medicaid payment system reimburses virtually all hospitals less than what it costs for inpatient care.

EMPLOYEES PAY MORE HEALTH COSTS

According to the Employee Benefit Research Institute, 43 percent of Americans paid higher monthly premiums in the last two years than in prior periods. Thirty-two percent paid more for deductibles and 40 percent paid more copayment and dependent coverage amounts. The information was derived from a survey of 1,000 individuals.

HOSPITAL BOND DEFAULTS INCREASE

This year has proved to be a record year in hospital bond defaults. Bond Investors Association (BIA), a nonprofit bond tracking agency, has estimated the total default in 1989 to be approximately $190 million. This represents approximately a 50 percent increase over 1988's $128 million in defaults. The president of BIA, Richard Lehmann, has stated that for those hospitals that do not control costs, "time is running out." On the contrary, defaults on nursing home debt significantly declined from $142 million in 1988 to $29 million in 1989. From 1986 to 1989, nursing home defaults totaled approximately $530 million while hospital defaults totaled $380 million.

HEALTH CARE INFLATION

According to the Department of Labor, health care costs increased on average 8.5 percent for the 12-month period ending December 1989, while overall inflation only increased 4.6 percent. In addition, the Department of Labor released the following cost increase data: outpatient services—increase of 11.7 percent; inpatient services—increase of 11.5 percent; hospital room fees—increase of 11 percent; prescription drugs—increase of 9.5 percent; and physician care costs—increase of 7.2 percent (a decrease of .3 percent from 1988).

HMO PROJECTED GROWTH

According to Kenneth Abramowitz, a senior analyst with Sanford Benstein & Co., a New York-based investment and management firm, "HMOs are the only answer." Mr. Abramowitz is predicting that due to the health care cost crisis, in the next 20 years all employees will be forced into health maintenance organizations (HMOs). Fee-for-service health plans, that covered 89 percent of the private-pay population in 1984, will decline to 10 percent by 1998. Preferred provider organizations will swing from 1 percent to 35 percent and HMOs will swing from 7 percent to 40 percent during the same period.

PART B PROCESS APPEALS

Since June 1989, approximately 5,700 requests for a hearing have been filed and only 21 percent (1,200) have been processed. Based on the statistics provided by the U.S. General Accounting Office, it is to the provider's advantage to appeal in person as the win-rate is 40 percent versus a 26 percent win-rate for an absentee appeal. The wait period to appeal-in-person is almost twice as long, at 300 days on the average.

MEDICARE FINAL PAYMENT RULE

On December 19, 1989, the Omnibus Budget Reconciliation Act of 1989 was enacted. The law maintains the 2.092 percent reduction in payments under Part A through December 31, 1989, as required under the final sequester order issued pursuant to the Gramm-Rudman-Hollings Act. The new law establishes a government-wide sequestration of 1.42 percent for the period January 1, 1990, to September 30, 1990. However, the Act also contains a provision that assures that the 1.42 percent sequestration does not result in a reduction of Medicare Part A payments to hospitals. Major provisions of the Act also effective for the period January 1, to September 30, 1990, are as follows:

- Capital costs of inpatient hospital services under PPS are reduced by 15 percent (sole community hospitals are exempt).
- Rural area PPS rate increases of marketbasket plus 4.22 percent (9.72 percent above 1989 rates).
- Large urban area PPS rate increases of marketbasket plus .12 percent (5.62 percent above 1989 rates).
- Other urban area PPS rate increases of marketbasket minus .53 percent (4.97 percent above 1989 rate).
- Recomputation of PPS standardized amounts considering budget neutrality.
- Maintained the 1.22 percent weighting factor reduction for each DRG provided for in the September 1, 1989, final rule.

SURPLUS FOR THE BLUES

Douglas Peters, a senior vice-president for the Chicago-based Blue Cross and Blue Shield Association, predicted that the Association's 74 health plans will report a $1 billion gain in reserves for 1989. This is a significant turnaround from the $3 billion of losses reported by the plans during 1987 and 1988. According to Peters, the financial improvement allowed the plans to lower increases in premium rates for subscribers. The Blues managed care plans, 93 HMOs, and 55 PPOs will show a slight profit for 1989 compared to a loss of $200 million for 1988.

ROPER TO HEAD CDC

William Roper, MD, will leave his White House post as the President's number two domestic policy adviser to become head of the Atlanta-based Centers for Disease Control (CDC).

MEDICARE TRUST FUND

In their annual report, the Medicare Trustees claim the Medicare Hospital Insurance Trust Fund is solvent and in solid financial shape through 1991. Last year, the Trustees indicated that the Trust Fund, that makes the payments to hospitals for inpatient care, would be solvent through the turn of the century. According to a report by Roland E. King, HCFA budget chief, the Trustees' report relies on overly optimistic economic assumptions about the national economy.

HMO PREMIUMS AND PROFITS

A recent survey conducted by the Group Health Association of America found that HMOs anticipate increasing their premiums during 1990 by an average of 16 percent. Of the HMOs who responded to the survey, 72 percent said they showed a profit in 1989.

AFFORDING LONG-TERM CARE

A report issued by Families U.S.A. Foundation and United Seniors Health Cooperative concluded that only one out of every six elderly Americans can afford to purchase private long-term care insurance. The study focused on individual long-term care policies that were offered by nine leading insurance companies; annual premiums averaged $2,700 and ranged from $1,255 when purchased at age 65 to $3,860 when purchased at age 79. The Health Insurance Association of America challenged this data claiming that 40 percent of the elderly can afford long-term care insurance; however, HIAA used a different criterion for determining affordability.

HOSPITAL PROFIT ON HIGH TECH

The Medical Technology and Practice Patterns Institute, using angioplasty as an example, found that larger teaching hospitals doing a high volume of specialized procedures earned greater Medicare profits. MTPPI found 51 percent of the 476 hospitals studied earned a profit of $59.5 million, while the remaining 49 percent lost $45.3 million. Hospital costs for angioplasty range from $2,500 to $31,658, with the profitable facilities earning $2,102 per case and the losers averaging $2,231 per case.

READMISSION REVIEWS

The HHS Office of the Inspector General (OIG) has recommended that HCFA should challenge the effectiveness of peer review organizations' scrutiny of hospital readmissions. HCFA annually spends $45 million to $55 million for PROs to review readmissions; only 1 percent of hospital readmissions are attributable to premature discharges. OIG recommended that HCFA consider the effectiveness of random case reviews rather than reviewing readmissions.

OUTPATIENT SURGERY INCREASE

Blue Cross and Blue Shield has found that outpatient procedures and related costs have risen significantly from 1983 through 1988. Outpatient surgery accounted for 35 percent of all surgery in 1988 compared to 21 percent in 1983. Outpatient costs have increased by 61 percent from 1983 through 1988, with outpatient surgery representing 50 percent of all costs incurred for surgery.

FINI

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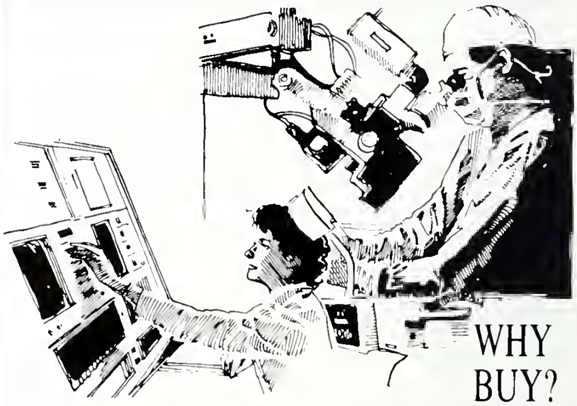

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PROFESSIONAL LIABILITY

MISMEDICATION OF THE ELDERLY

"There is a widespread problem of mismedication among older adults," says U.S. Inspector General (IG) Richard P. Kusserow, in a confidential January 1989 report entitled, *Medicare Drug Utilization Review.* Originally intended to foster development and implementation of an effective drug utilization review system under the Medicare program, the report focuses attention on medication-related issues that have significant liability implications for physicians.

Increased attention to allegations about the mismedication of elderly patients could result in more malpractice litigation against physicians and hospitals, and product liability claims against pharmaceutical manufacturers. Product liability litigation is costly and difficult to defend, as the plaintiffs' burden of proof is less onerous than it is in other liability cases. The high costs of litigation and liability insurance have inhibited research and production of many medications, some of which have been discontinued. The average indemnity payment in a medication-related claim against physicians exceeds $40,000; defense costs are nearly as high.

ELDERLY PATIENTS AT RISK

Americans 65 years or older consume 30 percent of the prescription drugs and 40 percent of the drugs dispensed. In 1986, older adults filled 613 million prescriptions at retail drug stores, an average of 15.5 prescriptions per person.

Although Americans over age 60 comprise roughly 17 percent of the population, they account for 39 percent of all hospitalizations and 51 percent of deaths resulting from drug reactions. In 1985, an estimated 243,000 older adults required hospitalization due to adverse drug reactions. One study cited in the IG report notes that in 1983, the cost of hospital and subsequent care related to adverse drug reactions among the elderly was $4.5 billion. Other estimates of annual health care costs associated with adverse drug reactions are as high as $7 billion.

The IG report says that 163,000 older adults experience serious mental impairment either caused or worsened by drugs. In addition, 61,000 older adults have developed symptoms that mimic Parkinson's disease due to prescribed antipsychotic drugs. Two million of the elderly are addicted or are at risk of addiction to minor tranquilizers or sleeping pills they use for at least one year. Each year, 32,000 of the elderly incur hip fractures due to drug-induced falls.

CAUSES OF MISMEDICATION

The IG report spreads blame for the mismedication of the elderly among manufacturers, medical schools, physicians, and patients. The report notes that although some pharmaceutical products are intended for older adults, the clinical studies required by the Food and Drug Administration (FDA) typically are performed only on healthy young adults. As a consequence, there is inadequate data about appropriate dosage levels for older patients or about adverse reactions to the drugs when consumed by older adults. Only 17 of the 200 most commonly prescribed drugs give specific geriatric dosage instructions. Although the FDA circulated voluntary guidelines in 1986 for inclusion of the elderly in premarketing clinical tests, few companies comply.

The Public Citizen Health Research Group, that published *Worst Pills, Best Pills* in 1988, studied 287 most commonly prescribed drugs for nonhospitalized older adults. The study designated 104 of these drugs (excluding oncology medications) as medications that should not be used by older adults because safer alternatives are available. Twenty drugs not recommended for use account for more than 83 million prescriptions filled for the elderly, at an annual cost of $1 billion. The entire list of 104 drugs in the "do not use" category represents 136 million prescriptions, about a quarter of the prescriptions filled for the elderly annually.

GERIATRIC PHARMACOLOGY TRAINING AND PATIENT EDUCATION

Physicians are criticized in the IG report for "widespread prescribing patterns that are suboptimal for older adults," practices blamed on inadequate training and education in geriatric pharmacology. Mismedication by physicians can occur in at least four ways, according to the IG report: (1) higher doses are prescribed when a lower dose would provide the same benefits with lower risks; (2) drugs with a greater potential for adverse reactions are prescribed when a less dangerous drug would be just as effective; (3) the particular drug prescribed is unnecessary either because of a misdiagnosis or nondrug therapy could be substituted; and (4) the combination of the prescribed drug with other drugs in the patient's regimen produces adverse effects. Monitoring and control of medication use by the elderly are complicated by the fact that 85 percent of the elderly patients have one or more chronic illnesses, for which they take multiple drugs.

In 1988, less than 2 percent of the students enrolled in the nation's medical schools were required to take courses in geriatrics. An article in the January 1988 *Annals of Internal Medicine* reported that most medical school students received only one course in pharmacology. By the time new physicians complete their residency, 100 new drugs have been introduced. Nearly all prescriptions written in 1988 by physicians who graduated from medical school in 1960 are for drugs about which they received no formal education.

Pharmacists are criticized in the IG study for failing to adequately review patients' drug regimens or to consult with physicians and patients when potential problems are identified. Only a small percentage of patients receive drug counseling services from pharmacists, even in states where such services are mandated by law. (Studies show that a majority of physicians do not dispense written information about drugs they prescribe.)

Older patients are partly to blame for their mismedication problems. The IG study found that compliance by the elderly with prescribed drug regimens ranges from 38 percent to 57 percent. Many older patients under- or overuse medications or share drugs with family and friends. Noncompliance with drug orders also results from unclear label advice such as "take as directed."

ADDRESSING THE MISMEDICATION PROBLEM

The inspector general's analysis of medication use by the elderly and other studies by the National Council on Patient Information and Education, senior citizens' lobbying groups, and various health coalitions suggest feasible solutions. Kusserow recommends a comprehensive, computerized drug utilization review under the Medicare program to promote quality of care and reduce costs associated with medication use and misuse. The program would identify physicians, pharmacists, and patients who demonstrate patterns of mismedication, and target high-risk segments of these groups for education efforts. Kusserow requests a blue ribbon panel to develop drug utilization review criteria and to make recommendations for expanding medical school curricula in the areas of pharmacology and geriatrics. In addition, Kusserow urges the FDA to expeditiously promulgate guidelines to require manufacturers to ensure adequate testing of drugs on elderly populations.

RISK REDUCTION SUGGESTIONS

The following recommendations can assist physicians and other health professionals to reduce the potential for injury to elderly patients and lower their own risk of being sued:

1. Take a complete medication history for each patient. Ask about over-the-counter drugs. Document the patient's inability to identify drug names or dosages.

2. Ask the names of all physicians the patient sees and the reasons. Such questioning may uncover additional medication use the patient overlooked.

3. Periodically ask and document patient allergies and drug intolerance. Attach a bright-colored alert to chart covers to call attention to the allergy information.

4. Carefully monitor prescriptions and refills. Do not permit unlicensed aides to administer or refill medications without a physician's specific approval.

5. Be familiar with indications and contraindications for drugs prescribed, dispensed, or administered, and know the signs of common side effects of drugs the patient takes.

6. Write clear instructions for prescription labels.

7. Dispense written information and instructions for medication use. Printed instructions for most drugs are available from *Patient Medication Instruction Program,* U.S.P.C., P.O. Box 5367, Twinbrook Station, Rockville, MD 20851; and *Drug Use Education Program,* American Academy of Family Physicians, 1740 W. 92nd St., Kansas City, MO 64114.

8. Include periodic pharmacology review in hospital medical staff in-service programs.

9. Evaluate drug utilization as part of the hospital quality assurance program. (The Joint Commission reports that 88 percent of the hospitals surveyed between May 1988 and May 1989 do not fully comply with standards on drug use evaluation.)

10. Encourage patients to ask questions about prescribed drugs. Ensure that the patient understands the drug's purpose, side effects, and contraindications. (Reprinted with permission from David Karp, San Rafael, CA, a professional liability claims consultant. *Loss Minimizer,* December 1989.)

PROFESSIONAL LIABILITY

James E. George, MD, JD, is director of the Department of Professional Liability Control, Medical Society of New Jersey, and A. Ronald Rouse is director of Special Projects, Medical Society of New Jersey.

Please address all comments and concerns to A. Ronald Rouse, Director of Special Projects, Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648. Mr. Rouse also can be reached by calling 609/896-1766, at MSNJ headquarters in Lawrenceville.

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PRESIDENT'S PAGE

YOUR PROFESSIONAL LIABILITY INSURANCE—II

Last month, I wrote of the importance to our membership of the Medical Inter-Insurance Exchange of New Jersey (MIIENJ), founded by the Medical Society of New Jersey, and of the "management company" the New Jersey State Medical Underwriters, Inc. (NJSMU), wholly owned by the Medical Society of New Jersey. Our members have been, and continue to be, well served by "our insurance company."

Although national statistics show the number of professional liability cases is trending slightly downward, the size of the verdicts is increasing. In 1989, six MIIENJ lawsuits resulted in adverse verdicts exceeding one million dollars each. Although the company is well positioned to meet such challenges, members of the Board of Directors of NJSMU and of the Board of Governors of MIIENJ agreed it was time to re-evaluate the claim management approach and activities.

A special study was authorized, through the consulting firm of Tillinghast. The consultants performed a thorough review, and have presented their findings and recommendations. Tillinghast concluded that top priority should be given to a search for a new president, filling the position vacated by Peter Sweetland's retirement due to illness. A search firm already has been engaged, and the process begun. The study team also recommended revised policies for claim management, improved strategies, and several proposals to enhance performance and evaluation. In addition, the study offered several proposals for improving management and Board oversight, to ensure proper control of claim management. The recent Tillinghast consultation report will be dealt with honestly and forthrightly by all involved, and I believe will result in further improvement of service to our members and to all insureds.

LONG-RANGE PLANNING RETREAT

The Board of Trustees recently held the Long-Range Planning Retreat. Members of the Board met with members of the Committee on Long-Range Planning and Development to discuss and review the Committee report.

The Committee chairman, Bernard A. Rineberg, MD, and members of the Committee, worked with diligence and commitment for over six months to produce this plan. The fact that they were able to produce a consistent and outstanding document in so short a time span is a tribute to their efforts, and to their dedication to this task.

The report will be submitted to the Board of Trustees for approval, and then will be submitted to the House of Delegates at our 1990 Annual Meeting.

Of perhaps equal importance to the production of this report was the process itself. Members of the Board of Trustees had an opportunity to consider crucial issues, apart from the context and constraints of our structured Board meetings. The committee members were an invaluable resource in our deliberations. The senior staff of the Medical Society of New Jersey also were present, and added further depth to our discussions. In all of this we were aided, and guided, by our facilitator Mark E. Sandberg, PhD, Associate Dean of the School of Business Administration, and Associate Professor of Management and Organizational Behavior, at Rider College.

The final report of the retreat recommends the process be repeated on a regular basis, perhaps annually. I know the Medical Society of New Jersey will benefit from this ongoing process to re-evaluate our goals, our successes, and our failures.

RETIRING FROM THE BOARD OF TRUSTEES

Three regular members and two ex-officio members will be retiring from the Board of Trustees, at the 1990 Annual Meeting. They are (in alphabetical order):

- **Palma Formica, MD,** our immediate past president, and former chairman of the Board of Trustees, has served in many capacities. Although leaving our Board, she will continue to provide representation for New Jersey physicians, and dynamic leadership for the Medical Society as a member of the AMA Delegation; and she will serve MSNJ as a member of the Board of Directors of the New Jersey State Medical Underwriters Inc. Her extraordinary commitment to the medical profession, and to our patients, is an asset we cherish.

- **Edith Goldie,** the medical student representative on the Board of Trustees, attends UMDNJ-Robert Wood Johnson Medical School. Ms. Goldie has been particularly conscientious in attending our meetings and participating in our programs.

- **Herman Robinson, MD,** has been a hard-working, insightful member of the Board of Trustees, and has chosen to retire from the Board at this time. He also has served diligently and conscientiously on the Board of Governors of the Medical Inter-Insurance Exchange of New Jersey for many years. He recently was elected to the Board of Directors of the New Jersey State Medical Underwriters Inc. His depth of knowledge will be invaluable in that forum.

- **Harold Yood, MD,** chairman of the Governing Council of the Hospital Medical Staff Section, has set a high standard as their first representative to our Board, this past year. He has long been involved in MSNJ activities, and will continue to work with the leadership.

- **Joseph Zawadsky, MD,** also is retiring from the Board at this time. Dr. Zawadsky's intelligence and thoughtfulness are well respected. In addition to his activities with MSNJ, he is the chairman of the Orthopaedic Department of UMDNJ-Robert Wood Johnson Medical School, taking this program from inception to maturity. We know he will continue to play an outstanding role in clinical teaching, research, and the practice of orthopaedics.

We will miss the wisdom, the experience, and the guidance of our five colleagues on the Board of Trustees. We are pleased, however, that they all will continue to serve the medical community, and their patients, to the betterment of health care in New Jersey. ☐

EDITOR'S DESK

ODE TO KOOP

L.M. Boyd wrote recently, "During the Great Plague of Europe from 1664 to 1666, everybody who could get tobacco smoked tobacco. They thought it might protect them. It didn't." That should have been expected. The only thing tobacco can protect against is old age—each "coffin nail" shortens life by a clear and measurable amount. [The list of diseases associated with smoking continues to grow. It even may be that tobacco contributes adversely to arthritis, since the plant is a member of the family, Solanaceae. Research at Rutgers University suggested that food derived from solanaceous plants might add to arthritic problems.]

Most people know the basic story of tobacco—that it was widely used by the Indians at the time of Columbus's voyages, that it was exported to Europe by explorers from several countries, and that it became a major crop in the colonies. Some may remember Jean Nicot, French ambassador to Portugal from 1559 to 1561, who introduced tobacco to the royal court and whose name was given to the genus as *Nicotiana.*

Although smoking was considered medicinal with marvelous curative powers for at least 50 years after its introduction into Europe, some recognized the deleterious effects of the product. James I, King of England, wrote of smoking in 1604, "A custom loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and in the black stinking fume thereof, nearest resembling the horrible Stygian smoke of the pit that is bottomless."

Despite such warnings, the insidious addictive qualities of tobacco have continued to enslave millions. In 1988, 5.2 trillion cigarettes were smoked. It is estimated that worldwide consumption of cigarettes will grow at a rate of about 1.9 percent a year, a rate higher than the projected population growth. Louis W. Sullivan, MD, Secretary of Health and Human Services, released the economic costs of smoking. He lambasted cigarette producers as "immoral and irresponsible," as reported in *The New York Times,* and added, "Cigarettes are the only legal product that, when used as intended, cause death." He accused the tobacco companies of "trading death for corporate profits." He estimated the costs for health care and insurance of smokers and time lost from work at $52 billion a year—a billion a week. These figures do not include the costs of "passive smoking," a topic dealt with so clearly in this issue of *NEW JERSEY MEDICINE* (pages 311-317).

It should be quite clear that the costs to the passive smoker, both in terms of economics and of health, are too great to allow "business as usual." All public buildings, including hospitals, should be smoke-free or, at the very least to accommodate the nicotine addict, have restricted smoking areas, preferably marked by danger signs—as seen in radiation areas; a skull and crossbones might also be appropriate. The ban on smoking in aircraft is sensible; in the future, perhaps, all flights, regardless of duration, will have proscriptions attached, or will utilize much more efficient ways of evacuating and isolating smoke—a project that also could help the beleaguered restaurateur.

The right of individuals to smoke in private quarters must be maintained, within limits; the principle is too elemental and important to be abrogated. Nonetheless, we can intercede with individuals by persuasion and education and by interdicting the advertising of tobacco products. That would not be interfering with first amendment rights; rights should not be enjoyed by those who would entice human beings to ingest pure poisons, regardless of the "legal" status of those poisons. But the arrogance of tobacco companies is unlimited. At the same time the experts in health care in all walks of life and at all governmental levels are promoting measures to control the deleterious effects of tobacco, the companies develop programs to expand their market penetration to special groups—women, athletes, minority groups, and the young. Creating higher purses for professional athletes does not justify sponsorship and advertising by cigarette companies, and athletes should stop applauding the merits of this sponsorship.

Can we become a smoke-free society by the year 2000? It may become more likely, as we continue to expand the rights of the nonsmoker and smokers find themselves falling into more and more apologetic modes. Smoking has become a social activity with no redeeming values.

> *"The believing we do something*
> *when we do nothing is the*
> *first illusion of tobacco."*
>
> Emerson, *Journals*, 1859

CONTROLLING TOBACCO SMOKE POLLUTION

The commissioner of environmental protection identified radon as "the most serious environmental health threat to New Jersey residents."[1] He was wrong. Tobacco smoke pollution kills more people than radon, but uniquely among pollution problems, effective control saves money.

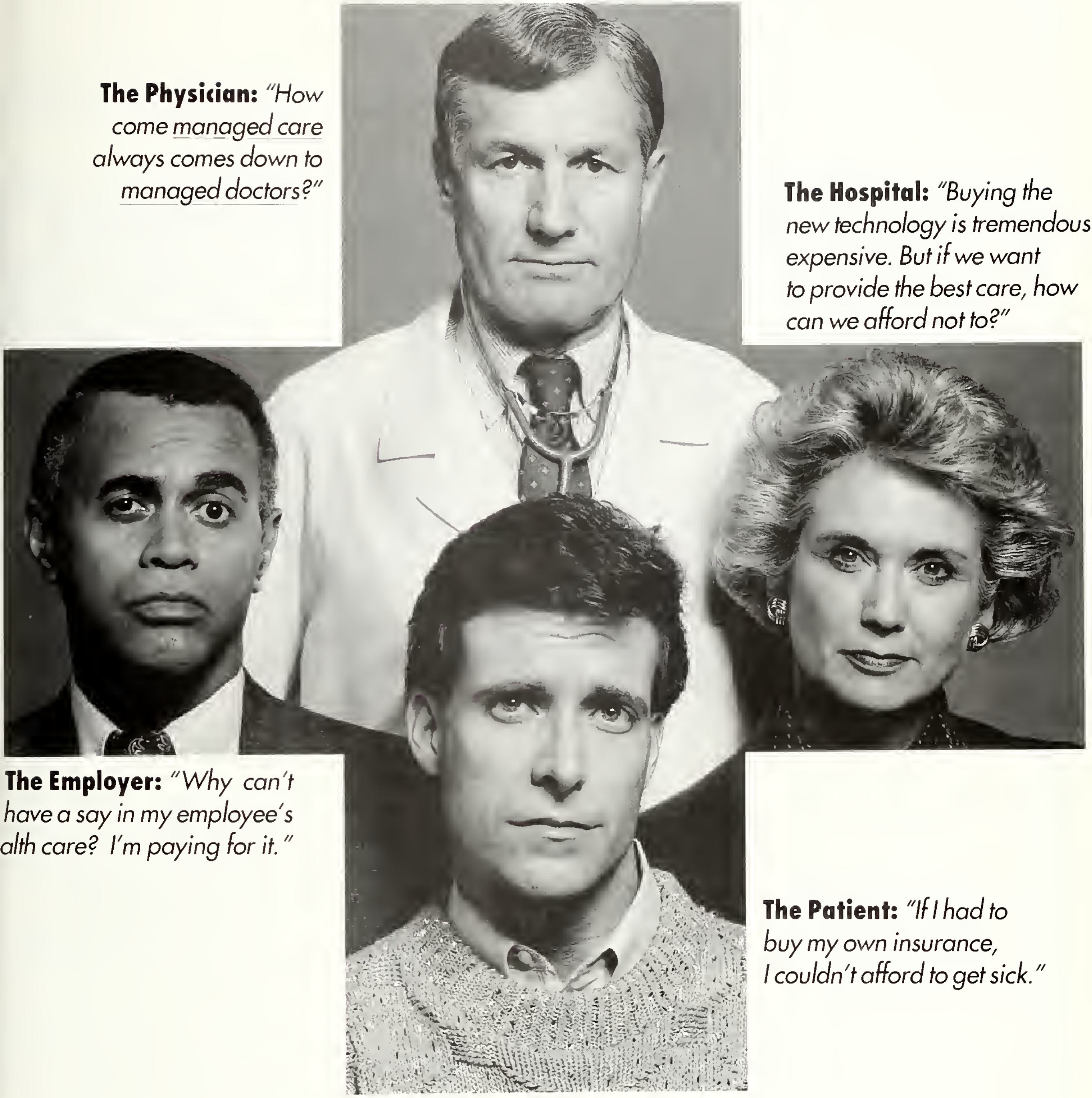
In this issue of *NEW JERSEY MEDICINE,* Dr. Ginzel carefully reviews the evidence that tobacco smoke causes cancer in nonsmokers and passionately sorts through the implications of this fact (pages 314-317). In addition to lung cancer in nonsmokers, accumulating evidence indicates that tobacco smoke pollution also causes fatal heart disease in nonsmokers.[2] Over 1,000 deaths per year (mostly from lung cancer and heart disease) are attributable to tobacco smoke pollution.[3]

An assortment of laws regulates smoking indoors in New Jersey. These laws, dating from the early 1980s, have become woefully anachronistic because of the more recent data Ginzel discusses. The evidence at hand justifies only one policy for the workplace and for places of public accommodation: there should be no smoking indoors.

The Commission on Smoking OR Health has called for revision of the state's tobacco smoke pollution control laws along these lines,[3] and we look forward to working with interested officials, legislators, and citizens to adequately protect the public from New Jersey's most serious environmental health threat, tobacco smoke. ☐ John D. Slade, MD, Commission on Smoking OR Health

REFERENCES

1. Kelly A: DEP: Radon peril is real. *The Home News,* September 29, 1989, page A-1.
2. Wells AJ: An estimate of adult mortality in the United States from passive smoking. *Environment International* 14:249-265, 1988.
3. Commission on Smoking OR Health: *New Jersey's Clean Indoor Air Laws: A Promise, but Little Protection.* New Jersey Department of Health, Trenton, NJ, May 25, 1989.



The Physician: *"How come managed care always comes down to managed doctors?"*

The Hospital: *"Buying the new technology is tremendously expensive. But if we want to provide the best care, how can we afford not to?"*

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The Patient: *"If I had to buy my own insurance, I couldn't afford to get sick."*

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Who's behind the rise in healthcare costs?

The answer is: everybody. Americans are living longer, requiring more (and more expensive) services. Technology has leaped ahead–and so have the costs associated with it. Medical malpractice insurance premiums–and the marginally necessary tests and procedures ordered in anticipation of litigation–ad billions more to the national healthcare bill.

As a result of these rocketing costs, hospitals, doctors and health plans are facing unremitting financial pressure. Patients and employers are letting coverage lapse or eliminating it altogether. And some of the answers to the problem are no answer at all: things like mandated solutions without doctor involvement or out-of-date reimbursement schedules.

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LETTERS & VIEWPOINTS

PREVENTION OF HANDGUN DEATHS

According to the National Center For Health Statistics, the number of firearm deaths, including accidental deaths from firearms in the latest estimate (1987), are 1,649. This is a far cry from the 33,000 that Dr. Robert Eilers claims in his article, "Prevention of Handgun Deaths." Dr. Eilers's article is a very emotional piece from a man obviously committed to the banning of firearms in private hands. However, his argument is colored by emotionalism. There is a number of unsupported statements such as, "Fatalities due to these causes have been rising at an epidemic rate." According to Dr. Eilers, "The most significant factor associated with the rise in violent deaths that have occurred over the last two decades has been the tremendous increase in the number of handguns in the home being used for protection and recreation." Given the actual health statistics for firearm deaths—1,649—and contrasting that with a variety of other causes of death, perhaps, may be more illustrative. For instance, there were 2,674 deaths from surgical and medical errors; 4,407 deaths from drownings; 4,938 deaths from fires and flames; 12,001 deaths from falls; 20,520 deaths from homicides and legal interventions; and, 45,901 deaths from motor vehicle accidents.

From a personal point of view, physicians, as responsible citizens in a free society, certainly can educate their patients about firearm safety by directing them to the National Rifle Association (NRA) and other organizations that run excellent courses in firearm safety that include such precautions as keeping guns unloaded, locked away, and ammunition separated from the firearms. From my own personal experience, having had my son at an NRA-sponsored target shooting club was extremely helpful and explained the seriousness of that responsibility to him.

Dr. Eilers makes the assertion that the widespread availability of handguns is "responsible for the increasing rate of violent death in our society." This again is an assertion without any data to back it up. While Dr. Eilers makes a weak disclaimer about the difficulty in comparing various societies and their handgun laws, or firearm laws in general, he still makes that comparison. To refute him, one merely must cite the experience of the Swiss, where firearms, by law, are kept in each home as part of the state militia.

When Dr. Eilers reports that the assassination of President Kennedy took place in 1966 we, of course, know it took place in 1963. He notes the strict New Jersey gun control laws that have been used in many communities by the police chief as a de facto way of preventing anyone from buying a handgun. Most gun owners are aware that delays from their police department in getting a handgun permit can be interminable. I am sure this meets with Dr. Eilers's approval, since he is an advocate of banning the handgun.

For over 55 years, federal laws have prohibited unauthorized possession of an automatic fire weapon; the laws mandate harsh penalties, including prison and heavy fines. Before a weapon is manufactured or imported into the United States, the Bureau of Alcohol, Tobacco, and Firearms (BATF) Technical Services Department must determine that, in fact, the rifles cannot be readily converted to automatic fire weapons. Therefore, there are no assault rifles lawfully held in private hands, except for specific exclusions that have been approved by BATF for collectors.

Finally, in the interest of intellectual rigor and consistency, I would expect Dr. Eilers to lead the charge to ban surgical and medical errors, which produce 1.6 times the deaths per year; recreational swimming, because drownings produce 2.7 times the deaths; banning of all poisonous substances, as poisonings are 3.1 times the deaths; and, finally, an outright ban on motor vehicles since they produce deaths at a rate of 27.8 times that of firearms.

As a physician and psychiatrist, I am sure it is evident that I disagree wholeheartedly with Dr. Eilers's article and do so based upon facts. ☐
James J. Hutchins, MD

AUTHOR'S RESPONSE

Dr. Hutchins appears to be eager to find errors in my article to the point of trying to make the reader believe that neither the editors nor I knew the year of President Kennedy's death, even though the article clearly states that the 1966 New Jersey gun law was passed "in the wake of the Kennedy assassination." However, it is Dr. Hutchins who has erred in his utilization of the 1987 mortality data from the National Center for Health Statistics (NCHS), which he states lists 1,649 firearm deaths. The NCHS compiles its data from death certificates filed with local health authorities. The statistics listing nonintentional firearm deaths is the figure Dr. Hutchins cites. This statistic does not include the far greater numbers of deaths that are intentional (suicide and homicide) deaths, that are listed as "firearm related."

Coincidentally, a report released from NCHS since my article appeared looked at the 1987 data specifically and found an increasing number of deaths from firearms now involve children and teenagers. In fact, a majority of the 1,649 deaths that he cites involve children playing with guns rather than hunting accidents as was the case in previous years. Equally tragic is the fact that the greatest recent increase in firearm-associated death rates was for teenagers occurring as a result of homicide and that guns accounted for about one in every ten deaths of children and teenagers.

If this is not enough evidence to convince Dr. Hutchins that firearm violence is epidemic in the country, he should read reports from the Surgeon General, the American Medical Association, the American Academy of Pediatrics, and the Centers for Disease Control, all of whom have made similiar statements and are referenced in my article. Dr. Hutchins's computations regarding the risk of firearm deaths compared to mortality from other activities are in error because of his misunderstanding of the NCHS database. When he implies that our society would never consider restricting personal freedoms such as these in order to save lives, he should consider current laws that bar hazardous products or otherwise protect the public's health. In regards driving, for example, there are laws requiring child safety restraints, seat belts, and speed limits. Certainly, the licensing requirements for driving are much more severe than those that currently exist for gun purchases.

Dr. Hutchins believes that it is far more preferable to educate the public about gun safety than to restrict gun ownership. However, his approach would have little impact on the vast majority of firearm injuries and deaths since these are not due to accidents but are intentional acts.

Although the numbers of nonintentional deaths have decreased in recent years, this is probably not a result of educational efforts, but the result of greater accuracy in the classifications of firearm suicides. In fact, studies suggest that the benefits of gun safety courses must be balanced against their ability to promote an interest in firearms, which increases the number of firearms in possession and their potential for causing death. Despite such education, a large segment of the public still keeps their handguns unsecured in their homes and many persons keep handguns loaded, even when children are in the household.

While Dr. Hutchins should be commended for teaching his son about gun safety, his mention of the NRA's efforts requires some comment. The NRA is spending an ever-decreasing proportion of its funds on gun safety education as it increases its outlays on lobbying efforts against any type of government restriction on firearms, whether these be concerned with assault weapons or the banning of bullets capable of piercing police vests. Dr. Hutchins states an NRA position when he attempts to confuse this issue by equating all assault rifles with the already banned automatic weapon. Fortunately, the public no longer believes some of the NRA's lobbying efforts. According to a recent poll commissioned by *Time* and CNN, a majority of gun owners favor a waiting period for the purchase of firearms. Hopefully, physicians will be in the forefront for leading the call for such initiatives in order to deal with this major public health problem. ☐ Robert Eilers, MD

MEDICATION ERRORS

I want to congratulate *NEW JERSEY MEDICINE* on the excellent paper on medication errors (87:27-34) published in the January issue. I think this type of study is most useful to all practicing physicians who are concerned with the malpractice situation.

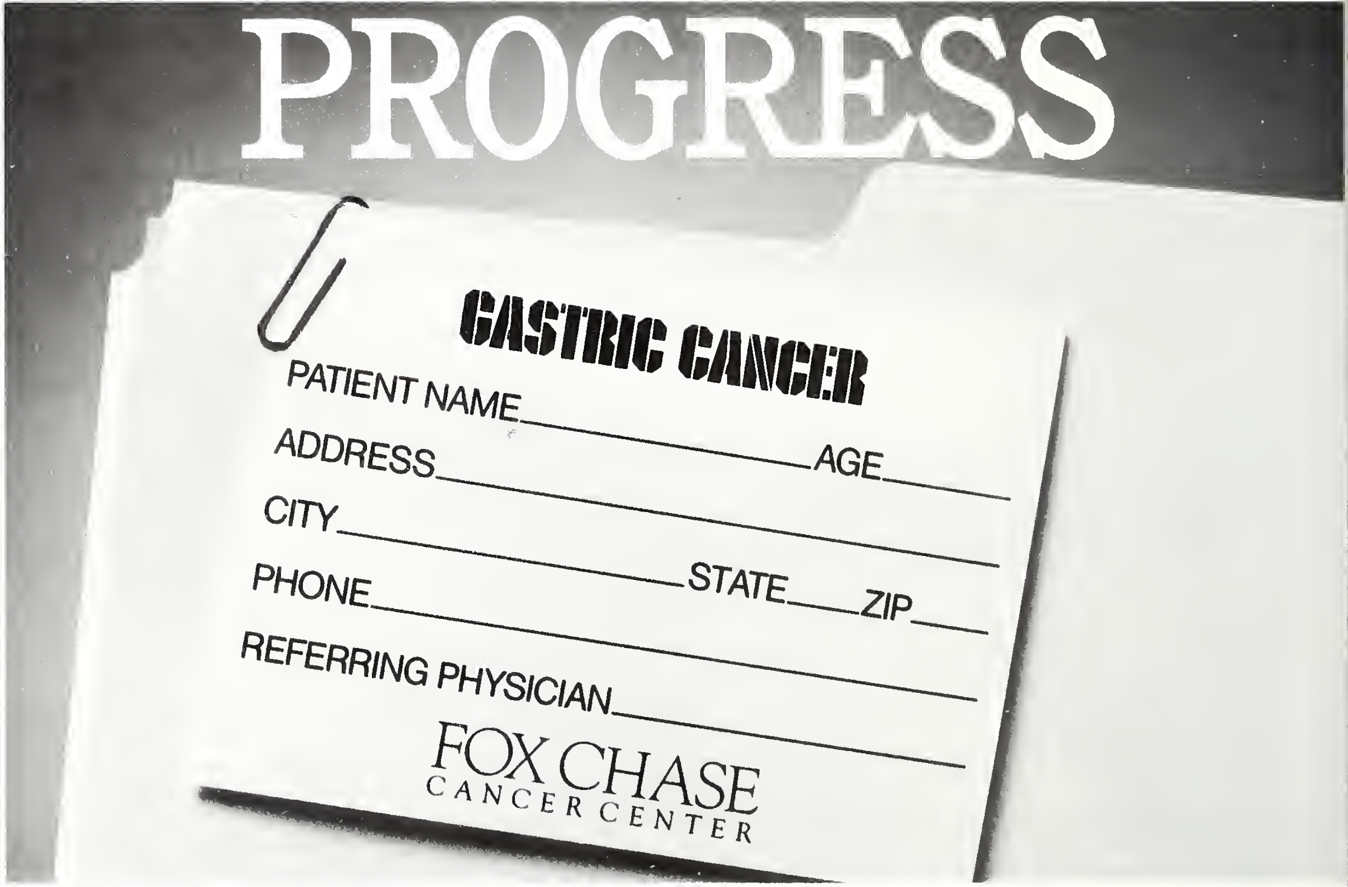
In the past ten years, I have performed some 250 medical/legal examinations as a neurologist for large law firms in New York City who are defending doctors and hospitals from malpractice claims. I currently am evaluating these cases and hope to learn something useful that may help other practitioners. I began this study several weeks ago after seeing two patients within a relatively short time frame, who were totally incapacitated by complaints that had no anatomical basis. This peaked my interest and eventually led me to Henry Miller's excellent articles in the *British Medical Journal* in 1961. As I analyze these cases, I think I am seeing what he saw, namely a significant number of "accident neuroses," except here they are all medical/legal in nature. In any event, it is challenging to study this problem that concerns us all so much.

I maintain an office in Ridgewood, where I see patients two days per week. Most of my practice is at the Neurological Institute in New York City. ☐ Frank K. Boschenstein, MD

LETTERS TO THE EDITOR

Letters to the editor are welcome. The editor-in-chief will review all comments on articles published in *NEW JERSEY MEDICINE,* as well as concerns for the physician community and the health care industry. Please address letters to Howard D. Slobodien, MD, Editor-in-Chief, *NEW JERSEY MEDICINE,* Two Princess Road, Lawrenceville, NJ 08648. ☐

FROM RESEARCH, PROGRESS



GASTRIC CANCER

PATIENT NAME________________ AGE______

ADDRESS________________________

CITY______________ STATE____ ZIP____

PHONE__________________________

REFERRING PHYSICIAN__________________

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BOOK REVIEWS

BASIC BIOMECHANICS OF THE MUSCULOSKELETAL SYSTEM

Margareta Nordin and Victor H. Frankel. Philadelphia, PA, Lea & Febiger, 1989. The second edition of this gold-standard text is a must for orthopedists, physical and occupational therapists, and other health professionals who deal with musculoskeletal disorders. The new edition adds chapters on the cervical spine, wrist, and hand. The chapter on biomechanics of the hand is a paradigm of clarity for this usually complex subject.

Five chapters deal with tissues and structures; the following ten chapters discuss mechanics, joint by joint. An introductory chapter gives a good overview of the metric system, including a conversion table. At the end of each chapter, its chief concepts are succinctly summarized, followed by a bibliography and recommendations for further reading. There is a comprehensive, easily understood glossary and a complete index.

Although a degree in engineering is not a prerequisite for understanding this book, a fundamental knowledge of a simple algebra and plane trigonometry is helpful. Mechanics is a quantitative science and would be unintelligible without numbers. The math, however, is presented clearly. Practical examples show how biomechanical concepts are applied clinically. Some of the photographs are too dark, but the more important illustrations are clear line drawings and uncluttered graphs.

Doctors Nordin and Frankel are from the Hospital for Joint Diseases in New York; orthopedist Frankel has devoted his life's work to this subject. Although there was an international roster of contributors, the book is not infected with a multiauthor syndrome. The authors have compiled another lucid and essential treatise. □ Richard M. Ball, MD

CHILDREN WITH ASTHMA. A MANUAL FOR PARENTS

Thomas F. Plaut, MD. Amherst, MA, Pedipress, Inc., 1988. Asthma is the leading cause of pediatric hospital admissions and is responsible for the largest number of missed school days. More than three million children have asthma, and the frequency is increasing. In addition, asthma mortality is on the rise, despite new management.

The foundation of asthma management must be the education of the pediatric patient and parents. The second edition of *Children With Asthma* proves to be an excellent information source. Pathology, physiology, asthma diaries, medications, and home treatments are covered thoroughly in lay terms with good illustrations. In particular, Dr. Plaut stresses the use of home peak flow meters, holding chambers with inhaled medications, and the use of an asthma record. By teaching patients to control symptoms, children can continue a normal lifestyle. There also is a resource list including books, asthma organizations, newsletters, videotapes, and equipment vendors. The book covers many common potential problems including babysitters, school, and travel.

This book emphasizes the team approach. It serves as an excellent education and reference source, and is highly recommended to the parents of children with asthma. □ Andrew Pedinoff, MD

BOOK REVIEWS

CLINICAL CARDIOLOGY, THIRD EDITION

Peter C. Gazes, MD. Philadelphia, PA, Lea & Febiger, 1990. Arguably, what most medical libraries need least is another textbook on clinical cardiology. Yet, Dr. Gazes's book is exceptional in that it represents the personal experience of a single author. As such, the textbook is free of the redundancies and inconsistencies of the more popular multiauthored tomes, but it suffers from certain opinionated statements and outdated concepts.

The third edition has been extensively rewritten in an effort to reflect the explosive developments in clinical cardiology, but some areas lag behind. For example, newer techniques in interventional cardiology such as atherectomy and angioscopy are not described, and Dr. Norwood would be chagrined to discover that "no corrective operative procedure" exists for the hypoplastic left heart syndrome (page 286). While the chapter on "arrhythmias" generally is excellent, there is scant mention of the role of invasive studies (EPS) in diagnosis and management (chapter 15).

Some of the terminology is archaic, e.g. transmural and subendocardial infarction (page 57), types A and B Wolff-Parkinson-White syndrome (page 58), and the classification of unstable angina (Table 4-2). Most would argue with Dr. Gazes that electrical alternans does not have the same significance as pulsus alternans (page 58) and that electrocardiogram (ECG) clockwise rotation of the heart does not relate to anatomical rotation (page 36).

On the other hand, this distinguished cardiologist contributes excellent discussions of the cardiovascular examination, diagnostic clues in cardiovascular disease, noncardiac surgery in cardiac patients, and an appendix for usual doses of cardioactive drugs. Notwithstanding the minor criticisms, I recommend this book to students, house officers, and even experienced cardiologists, especially those who are weary of burdensome multiauthored texts. ☐ Edwin L. Rothfeld, MD

HODGKIN'S DISEASE: THE CONSEQUENCES OF SURVIVAL

Mortimer J. Lacher, MD, and John R. Redman, MD. Philadelphia, PA, Lea & Febiger, 1990. Medical progress often comes at a price; in the case of Hodgkin's disease, advances in treatment effectiveness have resulted in late or long-term sequelae that have raised new challenges in the quest for mastery over this complex and still poorly understood illness.

Lacher and Redman, both lifetime students of Hodgkin's disease, and 35 other outstanding clinicians and investigators provide the reader with considerable insight into the myriad of sequelae pertaining to Hodgkin's disease itself as well as to treatment-related effects.

Considerations range from the epidemiology of second primary cancers to the late effects of chemotherapy and radiation, and include the panorama of infectious complications eventuating from induced immunoincompetence. Specific organ-site complications are recognized, in particular cardiovascular, pulmonary, gastrointestinal, renal, skeletal, and dental. Particular problems associated with pregnancy and progeny and the long-term psychosocial consequences are highlighted in this 1990 textbook.

The book is well organized, reads easily, and is thoroughly cross-referenced. Although substantial progress has been made in the effectiveness of treatment for Hodgkin's disease, we are kept mindful of the important iatrogenic factors that bear upon a successful outcome for this disease. ☐ Alan J. Lippman, MD

Long Odyssey of Babesiosis

SANDRA W. MOSS, MD

The history of babesiosis is traced from the discovery of the parasite in 1888, to its present endemic niche. The author uncovers clinical and epidemiological features of human babesiosis in a patient hospitalized in New Jersey.

Babesiosis is a malaria-like disease caused by the intraerythrocytic parasite, *Babesia.* It is endemic to Nantucket and other islands off the northeastern United States. The international odyssey that led to the identification and understanding of clinical babesiosis in the United States climaxed in New Brunswick, New Jersey in 1969.

The story of babesiosis began in Romania in 1888, moved to Texas in 1889, and then to Montana in 1902. There was silence until 1956 when the trail was picked up in Zagreb, Yugoslavia. From there, it detoured briefly to California and then to Ireland. In 1969, an alert hematology technician and three physicians in New Brunswick discovered the clue that set the National Communicable Disease Center in Atlanta on the correct trail to Nantucket.

Romania. In 1888, Victor Babès of Romania discovered a small protozoan in the blood of sheep suffering from an epizootic disease called "carceag." The genus was named *Babesia* in his honor, but it also is known as *Piroplasma* (referring to its pear shape). A similar parasite was found by Babès to be the cause of hemoglobinuric fever of cattle. Seventy-one species of *Babesia* have been discovered, and are responsible for infections in cattle, sheep, dogs, cats, horses, rodents, goats, and birds. Species such as *B. microti* (the most common cause of endemic human babesiosis), that parasitize rodents, assume amoeboid or ring forms, and can be mistaken for *Plasmodium falciparum* (malaria) by inexperienced observers. However, unlike the malaria parasite, *Babesia* does not produce pigment granules in the infected erythrocytes.

Texas. In 1889, the American bacteriologist Theobald Smith went to Texas to study a livestock disease called "redwater fever" (Texas cattle fever). Smith found *B. bigemina* in the affected animals. More importantly, he proved that Texas fever is transmitted by ticks. Cattle babesiosis was the first disease in which an arthropod vector was recognized.

Montana. In 1902 and 1903, intracellular parasites were identified in the blood smears of 18 people

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from the Bitter Root Valley who were suffering from "spotted fever." Over 100 other victims did not have parasitemia. The illness was severe and frequently fatal. The parasites were identified as members of the *Piroplasma (Babesia)* genus. Tick bites often were found on the victims. The researchers concluded incorrectly that what now is known as Rocky Mountain spotted fever (a rickettsial disease) was caused by the *Babesia* parasite; they proposed the name "piroplasmosis hominis" for the disease, then known as "spotted fever." In retrospect, it is evident that some of the cases were Rocky Mountain spotted fever, and other cases, quite possibly, were human babesiosis. However, by modern standards, the Montana series lacks sufficient documentation for a clear diagnosis of human babesiosis.[1]

Yugoslavia. Human babesiosis resurfaced in the medical literature over 50 years later in a European publication called *Documenta de Medicina Geographica et Tropica.*[2] A 33-year-old tailor from Strmec, Yugoslavia, was admitted to the Department of Medicine at the University of Zagreb on June 16, 1956, in critical condition. He had an eight-day history of malaise, fatigue, and anorexia, with the subsequent onset of gross hematuria, abdominal pain, and headache. In 1945, he had undergone splenectomy for injuries suffered in an automobile accident. He never had been to the malarial area of Yugoslavia. He drank one litre of "spirits" daily and often was intoxicated. On admission, he had fever, anemia, and hemoglobinuria. By June 17, he was completely anuric. The diagnosis was assumed to be acute hemolytic anemia of the idiopathic or secondary type and he was treated with penicillin, streptomycin, and cortisone. He died on hospital day 2.

The blood smear showed "multiple tiny extended rings and rods in the erythrocytes, especially the hemolyzed ones." These parasites subsequently were identified as *B. bovis.*

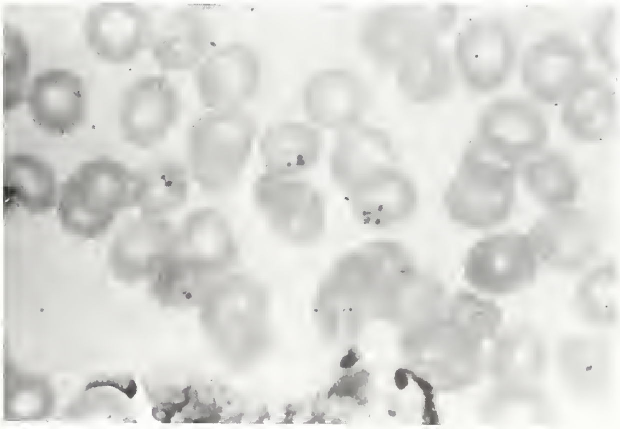

Figure 1. Blood smear from the patient, hospitalized in New Brunswick, in 1967. Parasitized *Babesia microti* are present in several erythrocytes. A tetrad form is seen within one of the cells. (From the collection of Dr. Vincent Galdi.)

The Yugoslav group conducted a small-scale epidemiological study and found that cattle near the patient's rural home had contracted babesiosis a fortnight before the onset of the patient's illness. Furthermore, in the local fields where the patient often grazed his cattle, there were many ticks of the type known to transmit babesiosis in cattle.

The investigators concluded with considerable insight: "Experiments on animals have shown that after experimental splenectomy infection with piroplasmata causes a very grave disease leading to the death of most animals. . . . We suppose therefore that a 'biological experiment' with fatal outcome took place in our patient due to the splenectomy."[2]

California. All was quiet for 11 years, until a case was reported from California.[3] A 46-year-old amateur photographer, who took hikes into the isolated coastal areas near San Francisco, became ill with symptoms consistent with malaria. He had a past history of splenectomy for hereditary spherocytosis. He was treated for presumptive malaria with chloroquine for 15 weeks and recovered. His original blood smear showed parasites similar, but not identical, to *Plasmodium.* Antibodies to *Babesia* were found in his blood. The *Babesia* species remains unknown.

Ireland. The third human case was recognized in Ireland and was reported one year later in the *British Medical Journal.* The article begins with a quote from Exodus (9:3): "The fifth plague: 'Behold the hand of the Lord is upon thy cattle which is in the field, upon the horses, upon the asses, upon the camels, upon the oxen and upon the sheep: there shall be a very grievous murrain.' "[4] In parts of Ireland, "murrain" is synonymous with "redwater" in cattle.

A 47-year-old fisherman was hospitalized in Downpatrick with a four-day history of hematuria, nausea and vomiting, anorexia, and high fever. His hemoglobin fell to 7.2 g/dl and there was evidence of gross hemolysis. Past history included surgery several months earlier for perforated duodenal ulcer requiring multiple transfusions. The spleen had been torn during surgery and a splenectomy had been performed. He was transferred, shocky and moribund, to Belfast City Hospital. Intraerythrocytic parasites were seen on the blood smear and the working diagnosis was malaria due to *P. falciparum,* possibly acquired from the earlier transfusions. Peritoneal dialysis was performed. Exchange transfusion was planned, but he died three days after admission.

Interviews with the family revealed that the patient had been in County Galway on a camping vacation, where redwater fever was known to be present in cattle. All the blood donors from his earlier surgery were traced and found to be negative

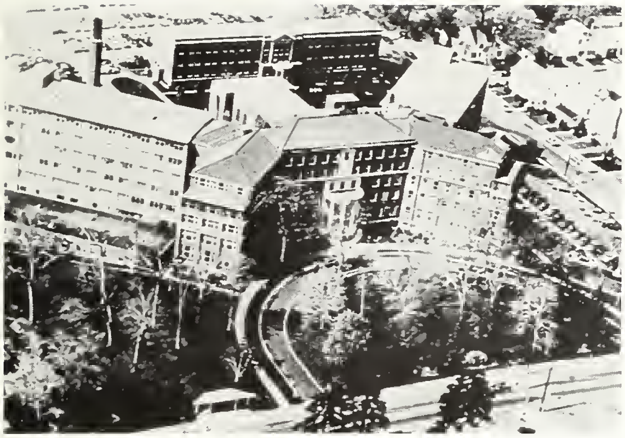

Figure 2. St. Peter's Medical Center, New Brunswick, as it appeared in the 1960s. The present-day St. Peter's Medical Center has been redesigned and expanded.

for malaria. A reference laboratory subsequently identified the parasite as *B. divergens.*

In a subsequent investigation, British researchers tried to determine whether normal people living in tick-infested areas of Ireland had latent infections identifiable by blood testing. Although inconclusive, the study was memorable for the unusual method of recruiting experimental subjects. As the researchers approached the suspected rural site in Galway, they discovered a large number of Irish Army troops participating as extras in the Metro-Goldwyn-Mayer spectacle, *Alfred the Great,* filming "on location" in Ireland. The soldiers had been camped in the tick-infested fields for two weeks and volunteered to donate blood for the babesiosis study.[5]

New Brunswick, New Jersey. In July 1969, Dr. Benjamin Glasser, a colon and rectal surgeon from New Brunswick, received a long-distance telephone call from Nantucket. The caller, whose relatives had been cared for by Dr. Glasser, implored him to come to the assistance of a middle-aged Nantucket neighbor, who appeared to be dying. Dr. Glasser flew to Nantucket in a private airplane provided by the friend of the sick woman. The patient, who had remained undiagnosed in Massachusetts, told Dr. Glasser she wanted to die at home. He proposed an alternate plan: immediate transfer to St. Peter's Medical Center in New Brunswick. Accompanied on the private airplane by Dr. Glasser, the patient arrived at St. Peter's Medical Center on July 13, 1969. Physical findings at the hospital were normal except for fever and pallor.[6]

The case report, that subsequently appeared in *The New England Journal of Medicine* indicated the patient, a 59-year-old woman, had a two-week history of fever, headache, and crampy abdominal pain.[7] She previously had been in excellent health and had no history of splenectomy. Two months prior to admission, she had left Santa Barbara, California, for her summer home on Nantucket Island. Her dachshund often chased and caught small rodents near her cottage. Aware that ticks were common in the area, the patient examined her dog daily and removed ticks with tweezers or her fingers. She also had removed one tick from her own suprasternal notch.

An alert laboratory technician found the correct clue the next morning: While routinely examining the blood smear, Marie Hahn noted intracellular bodies resembling malaria.[8]

Dr. Vincent Galdi, Director of Laboratories at St. Peter's Medical Center, recalls the case: "My involvement with the case began as follows: Marie Hahn came to me to review a blood smear which, according to her, contained malaria parasites. I looked, and I agreed with the presence of malarial parasites, all in ring form. The attending physician was notified and, shortly thereafter, Dr. Benson, professor at the medical school, came to look at the malarial parasites."[9]

Dr. Gordon D. Benson, currently chief, Division of Gastroenterology and Liver Diseases at the University of Medicine and Dentistry of New Jersey in Camden, noted: "I was asked to see the patient in consultation because someone thought I knew something about malaria. After my initial evaluation, I telephoned the Department of Health in Massachusetts. They did not seem to be particularly interested in the problem so I made contact with the Parasitic Diseases Branch of the National Communicable Disease Center in Atlanta. They were quite interested and were particularly helpful. The blood smears were sent to them for review."[10]

On July 18, an internal memorandum was sent from the chief of the Parasitic Diseases Branch to the director of the National Communicable Disease Center (now the Centers for Disease Control). The subject of the memorandum was "Cryptic Parasitemia—New Jersey." After duly noting Dr. Benson's phone call and the receipt of the slides, the memorandum recorded the finding of ring forms consistent with malaria. Further study of the "distinct quadranucleated 'Maltese Cross' intraerythrocytic bodies" led to a final diagnosis of *Babesia sp.* Dr. Ronald Altman, state epidemiologist, New Jersey State Department of Health, was contacted and agreed with plans for a clinical and epidemiologic investigation. On July 18, Dr. Karl Webster, chief, Malaria Surveillance, Parasitic Diseases Branch, and Dr. Arthur Dover, epidemic intelligence service officer, Parasitic Diseases Branch, left Atlanta for New Brunswick.[11]

Dr. Galdi and Dr. Benson recall that the actual recognition of *Babesia* was made by Neva Gleason, a laboratory technologist at the Communicable Disease Center, who also had recognized *Babesia* in the California case one year earlier. The species isolated in New Brunswick was determined to be *B. microti.* The patient's blood was sent to Atlanta for further study; infection was established in laboratory animals. Acute and convalescent sera were used for antibody studies.

Marie Hahn recalls interest in the case ran very high at St. Peter's Medical Center, where slides of the blood smears were left out on the laboratory bench for interested visitors to examine. The Communicable Disease Center brought the case to national attention in its *Morbidity and Mortality Weekly Report* on August 15, 1969.

Chloroquine was prescribed for the patient on hospital day 2, while the diagnosis of malaria still was being considered. Once babesiosis was identified, chloroquine was continued. The patient improved over a period of seven to ten days and eventually made a full recovery, returning to her home in Nantucket. Dr. Glasser maintained contact with her until her death from carcinoma several years ago.

Nantucket. The epidemiology of babesiosis was uncovered as a result of the National Communicable Disease Center's interest in the New Brunswick case. Ticks of the *Ixodes* genus transmit babesiosis. On Nantucket, the previously unknown species called *Ixodes dammini* (named in honor of Gustave Dammin, a Harvard Medical School pathologist) was identified as the carrier of endemic babesiosis. The most common tick reservoir is the white-footed mouse *(Peromyscus leucopus)*, although a variety of other species, including the white-tailed deer, are also reservoir hosts. In referring to the pre-adult stage of the tick life cycle, Robert Desowitz aptly dubbed them "the dangerous nymphs of Nantucket."[12]

By 1977, approximately 25 cases of babesiosis had been reported from Nantucket, and the name "Nantucket fever" was found in the medical literature[13] as well as the popular press.[14] By 1980, close to 100 cases of *Babesia microti* infection had been reported in the United States. The endemic area was largely confined to the coastal islands of Massachusetts and New York.

In 1977, a serologic survey of visitors to Nantucket as well as residents of the island was undertaken.[15] Approximately 2 percent of people undergoing routine diagnostic studies at Nantucket Hospital had *B. microti* antibody titers. However, only about one-third of those with evidence of exposure to *Babesia* had a history of a febrile illness. This study proved that infection with *B. microti* may be asymptomatic or characterized by mild and self-limited symptoms. Some victims develop a moderately severe and debilitating illness characterized by fever, chills, malaise, myalgias, and hemolytic anemia. Therapy may be supportive or may include chloroquine and, recently, pentamidine. In splenectomized patients, the disease can be fatal.

CONCLUSION

Human babesiosis is a parasitic infection with a long and colorful international history. Although the disease in the United States is endemic to Nantucket Island, Massachusetts, the key step in identifying the illness and its etiology took place in 1969 at St. Peter's Medical Center in New Brunswick. The New Brunswick case was important because it led to the recognition of an endemic parasitic disease in the northeastern United States. It also was the first case of babesiosis involving a patient with an intact spleen. It led to the development of diagnostic tests for the disease and a vigorous epidemiological interest in human babesiosis.

Three New Jersey physicians—a colon and rectal surgeon, a hospital pathologist, and a gastroenterologist—together with an observant hematology technician, gave New Brunswick a significant place in the history of parasitology. ■

Submitted: September 1989;
Accepted: November 1989

REFERENCES

1. Wilson LB, Chowning WM: Studies in pyroplasmosis hominis ("spotted fever" or "tick fever" of the Rocky Mountains). *J Infect Dis* 1:31-57, 1904.

2. Skrabalo Z, Deanovic Z: Piroplasmosis in man. *Doc de Med Georgr et Trop* 9:11-16, 1957.

3. Scholtens RG, et al.: A case of babesiosis in man in the United States. *Am J Trop Med Hyg* 17:810-813, 1968.

4. Fitzpatrick JEP, Kennedy CC, McGeown MG, et al.: Further details of third recorded case of redwater (babesiosis) in man. *Br Med J* 4:770-772, 1969.

5. Garnham P, Donnelly J, Hoogstraal H, et al.: Human babesiosis in Ireland. *Br Med J* 4:768-770, 1969.

6. Glasser, B: Personal communication.

7. Western K, Benson G, Gleason N, et al.: Babesiosis in a Massachusetts resident. *N Engl J Med* 283:854-856, 1970.

8. Hahn M: Personal communication.

9. Galdi V: Personal communication.

10. Benson GD: Personal communication.

11. Schultz MG: Cryptic parasitemia—New Jersey. Public Health Service Memo, NCDC, Atlanta. July 18, 1969.

12. Desowitz RS: *New Guinea Tapeworms and Jewish Grandmothers.* New York, NY, W.W. Norton, 1981.

13. Scharfman WB, Taft EG: Nantucket fever: An additional case of babesiosis. *JAMA* 238:1281-1282, 1977.

14. Altman LK: Malaria-like disease diagnosed in two on Long Island. *The New York Times.* New York, NY, September 25, 1977.

15. Reubush TK, Juranek DD, Chisholm ES, et al.: Human babesiosis on Nantucket Island: Evidence for self-limited and subclinical infections. *N Engl J Med* 297:825-827, 1977.

CASE REPORT

Cancer Recurrent at Stapled Colon Incision

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LUCIUS D. CLAY, III, MD
MICHAEL UMANOFF, MD
JAMES J. CHANDLER, MD

Recurrence of colon cancer at a stapled colotomy site separate from the anastomosis was discovered through a rising carcinoembryonic antigen (CEA). Resection resulted in cure. Exfoliation and implantation of cancer cells is discussed.

No significant increase in survival or alteration in recurrence rates has been obtained in the treatment of colorectal carcinoma.[1,2] Surgical intervention affords patients the only chance for long-term survival. Accepted surgical standards include resection of the lesion with appropriate margins and with the lymphatic drainage basin. Other recommendations incorporate aspects of the so-called no-touch technique as expounded by Barnes and Turnbull and include high ligation of the vascular structures, isolation of the lesion by proximal and distal ligation of the colon, avoidance of manipulation, and use of intraluminal irrigation.[3,4] Although these measures carry no proven benefit, they place importance on the ability of tumor cells to exfoliate, to remain viable, and, theoretically, to implant. Bowel continuity can be re-established with a handsewn or stapled anastamosis. Some techniques with the end-to-end stapling instrument utilize a separate incision for introduction of the stapler.[5,6] This report concerns implantation of colonic cancer cells at colotomy site.

A 43-year-old white woman presented with an obstructing left colon carcinoma and underwent emergency transverse colostomy followed later by a left hemicolectomy. At the latter operation, a colonic carcinoma was found at the junction of the descending and sigmoid colon. This transmural tumor involved the lateral pelvic wall, the broad ligament, and the uterine cornu. A total abdominal hysterectomy and bilateral salpingo-oophorectomy was carried out at the same operation. Bowel continuity was restored using the end-to-end anastomosis (EEA) stapler introduced via a proximal colotomy. The colotomy was closed with a TA-55 stapling instrument. The pathologist diagnosed a moderately well-differentiated adenocarcinoma of the colon. Tumor involvement was found in two regional lymph nodes.

Postoperatively, the patient received 5,000 rads of cobalt 60 radiotherapy to the area of extra-intestinal extension and one year of systemic 5 fluorouracil. Five months after chemotherapy was stopped, a rise in the patient's serum carcinoembryonic antigen (CEA) level was noted. Radiographic and endoscopic evaluation failed to reveal recurrent disease, and a second-look exploratory laparotomy was performed. At operation, a recurrent tumor was found on the serosal surface of the colon where the colotomy had been closed. A segmental resection was carried out. No other area of disease was noted. Pathological analysis confirmed that the tumor was limited to the serosal aspect of the bowel, without transmural extension, and histopathology was similar to that of the original tumor.

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Exfoliation, continued cell viability, and subsequent implantation of tumor cells as a cause of distal or suture line recurrence have remained a controversial subject. Some surgeons believe such instances of recurrence represent residual disease.[7] Many authors, however, have reported large numbers of exfoliated cells within the intestinal lumen.[8-10] The ability of these cells to remain viable has been demonstrated by Umpleby and associates.[8] Implantation of these tumor cells never has been proved conclusively, but there are many publications alluding to this as a plausible mechanism of recurrence.[11] It is believed that intact colorectal mucosa acts as a barrier to tumor spread and that areas of mucosal damage form nutrient beds for implantation.[12] In view of this, suture lines, anal fissures, anal fistulas, hemorrhoidectomy sites, cecostomies, and other areas of mucosal injury may serve as beds for implantation and recurrence.[12-18]

In the case reported, it appears implantation at the time of the original anastomosis caused the subsequent recurrent tumor. The location of the recurrent tumor at the proximal colotomy site would seem to imply that the tumor cells were implanted when the stapling device was withdrawn through the colotomy. Closure with TA-55 stapler results in everting staple line; this would account for the location of this recurrent tumor on the serosal surface.

Turnbull proposed a "no-touch" technique: limiting tumor manipulation, ligating the bowel proximal and distal to the tumor, and obtaining vascular control prior to mobilization of the bowel. This would theoretically reduce the incidence of lymphatic, vascular, and intraluminal spread of tumor cells. Additionally, Turnbull suggested the use of intraluminal irrigation or instillation of tumoricidal agents to reduce the number of free viable cells.[4] But significant improvement in survival statistics never has been documented clearly with the use of the no-touch technique. Tumor cell implantation is uncommon. Nonetheless, many instances of local or anastomotic recurrence can be attributed to this mechanism. Distal recurrences also have been attributed to circular staplers when passed through the rectum from below.[12] Larger series, however, document that the use of end-to-end staplers for low anterior resections has not resulted in an unusually high incidence of local recurrence.[19] The advantage of obtaining a low anastomosis and the preservation of sphincter function after resection of low-lying lesions outweighs the risk of this rare occurrence.

In treating more proximal lesions, it is reasonable to incorporate surgical techniques which minimize the possiblity of implantation. Specifically, when using stapling devices, it would seem appropriate to avoid the use of the proximal colotomy for introduction of the circular stapling device. The colotomy adds an extra suture line at risk for implantation as well as for other complications. Intraluminal irrigation and early ligation of the bowel lumen do not add a great deal of time or complexity to colon resections and also should be utilized when feasible. ■

Submitted: March 1989;
Accepted: December 1989

REFERENCES

1. American Cancer Society: Cancer statistics 1986: CA-A. *Cancer J Clinicians* 36:9-25, 1986.

2. Welch JP, Donaldson GA: Recent experience in the management of cancer of the colon and rectum. *Am J Surg* 127:258-266, 1974.

3. Barnes JP: Physiologic resection of the right colon. *Surg Gynecol Obstet* 94:723-726, 1952.

4. Turnbull RB Jr, Kyle K, Watson FR, Spratt J: Cancer of the colon. *Ann Surg* 166:420-427, 1967.

5. LeBlanc KA, Russo VR: Modification of the end-to-end stapled anastomosis utilizing intersecting staple lines. *Arch Surg* 123:110-112, 1988.

6. Nance FC: New techniques of gastrointestinal anastomosis with the EEA stapler. *Ann Surg* 587-600, 1979.

7. Rosenberg IL, Russell CW, Giles GR: Cell viability studies on the exfoliated colonic cancer cell. *Br J Surg* 65-188-90, 1978.

8. Umpleby HC, Fermon B, Symes MD, Williamson RCN: Viability of exfoliated colorectal carcinoma cells. *Br J Surg* 71:659-663, 1984.

9. Vink M: Local recurrence of cancer in the large bowel. *Br J Surg* 41:431-433, 1954.

10. McGrew EA, Laws JF, Cole WH: Free malignant cells in relation to recurrence of carcinoma of the colon. *JAMA* 154:1251-1254, 1954.

11. Keynes W: Implantation from the bowel lumen in cancer of the large intestine. *Ann Surg* 153:357-64, 1961.

12. Norgren J, Svensson JO: Anal implantation metastasis from carcinoma of the sigmoid colon and rectum. *Br J Surg* 72:602, 1985.

13. Beahrs OH, Phillips JW, Dockerty MB: Implantation of tumor cells as a factor in recurrence of carcinoma of the rectosigmoid. *Cancer* 8:831-838, 1955.

14. Boreham P: Implantation metastasis from cancer of the large bowel. *Br J Surg* 48:103-108, 1958.

15. Le Quesne LP, Thomson AD: Implantation recurrence of carcinoma of rectum and colon. *N Engl J Med* 258:578-582, 1958.

16. Rollinson PD, Dundas S: Adenocarcinoma of the sigmoid colon seeding into pre-existing fistula in ano. *Br J Surg* 71:664-665, 1984.

17. Guiss RL: The implantation of cancer cells within a fistula-in-ano. *Surgery* 36:136-139, 1954.

18. Personal communication: Drs. Salvati, Rubin, and Eisenstat, Plainfield, NJ.

19. Malmberg M, Graffnes H, Ling L, Olsson S: Recurrence and survival after anterior resection of the rectum using the end-to-end anastomotic stapler. *Surg Gynecol Obstet* 163:231-234, 1986.

Colonic Lipomas

Endoscopic and Radiologic Characteristics

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GABRIELE L. VILLA, MD

We present three cases of colonic lipomas; the first lipoma was removed endoscopically, the other two lesions were left in situ following recognition of their benign natures. We recommend that lesions of the colon recognized as lipomas and found incidentally be left alone.

Gastrointestinal endoscopists recommend removal of colonic polyps because of the concern that polypoid lesions are malignant or will become malignant. Should the probability of malignancy be known with some degree of certainty, lesions that have little or no potential for malignant changes could be left alone, thus sparing the patient a potentially dangerous procedure.

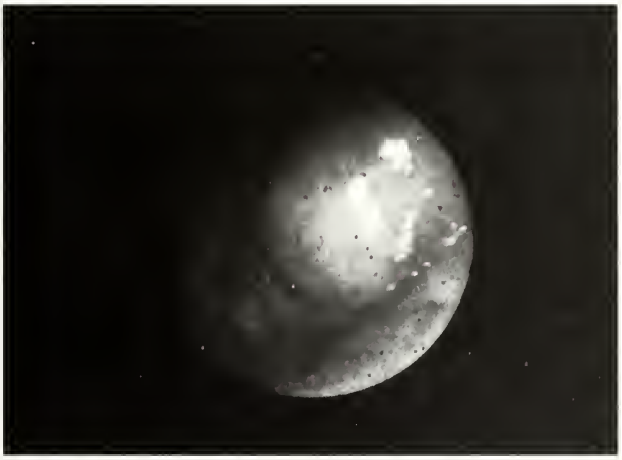

Figure 1. Descending colon in patient 1. There is smooth, movable growth covered by intact mucosa.

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We encountered lipomas of the colon in three patients examined by radiologic and endoscopic techniques. Although the first lesion was removed endoscopically, augmented evaluation of the two other patients led to the recommendation that no removal be carried out. The main reason for this report is to illustrate the appearance of colonic lipomas and to recommend, that once properly recognized, these lesions be left alone.

Case Report 1. A 53-year-old diabetic woman was

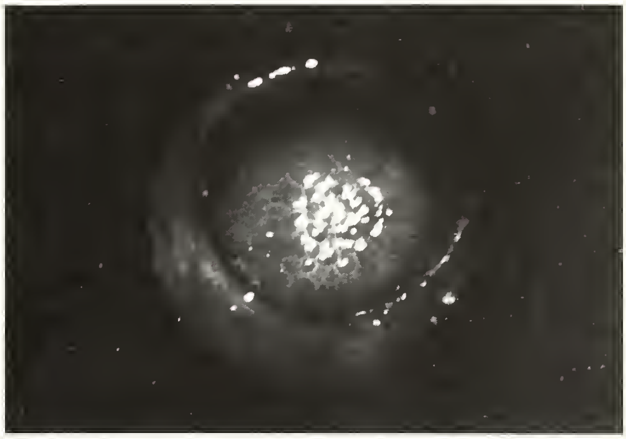

Figure 2. Endoscopic appearance of a lipoma found in patient 2. It is smooth, soft to touch, and easily indented with the biopsy forceps.

found to have occult blood in her stools during the course of a routine physical examination. She had an antral ulcer in the past as well as diverticulosis. A barium enema (Figure 1) revealed the presence of the 13 mm lesion in the proximal descending colon; it was movable and on a stalk. Colonoscopy confirmed its presence; it was removed and found to be a submucosal lipoma without any malignant potential. A recurrent antral ulcer was found, probably explaining occult blood in the stools.

Case Report 2. A 77-year-old female was referred for an endoscopic evaluation, two years following removal of an adenocarcinoma of her transverse colon. Her entire colon appeared normal except for a smooth, soft polypoid lesion (Figure 2) measuring 1 x 1.5 cm in her ascending colon. A barium enema confirmed its presence and the smoothness of the lesion suggested a lipoma. A computed tomography (CT) scan of the abdomen (Figure 3) revealed a fat density mass just above the ileocecal valve. A colonoscopy carried out 12 months later again revealed the presence of a smooth, unchanged polypoid lesion (Figure 4). Because we felt she had a benign lipoma of the ascending colon, the lesion was not removed.

Case Report 3. A 43-year-old woman underwent a colonoscopy following resection of an adenocarcinoma three years before. Her colon appeared normal, but a smooth, soft sessile tumor, measuring 1 x 1.5 cm, was found (Figure 5) in her ascending colon. A barium enema confirmed its presence. A CT scan of the abdomen showed the lesion to have fat density. Since we were reasonably certain we were dealing with a lipoma, the lesion was left intact. A followup colonoscopy performed 18 months later revealed a normal colon and no change of the previously diagnosed lipoma of the ascending colon.

METHOD

Colonoscopy was performed using an Olympus colonoscope following standard bowel preparation. CT scan of the abdomen was obtained using a Somatome DRH scanner (Siemens, Iselin, New Jersey), with scanning times of three or four seconds, at 8 mm section thickness, and 8 mm table increments. Barium enema was performed following standard bowel preparation.

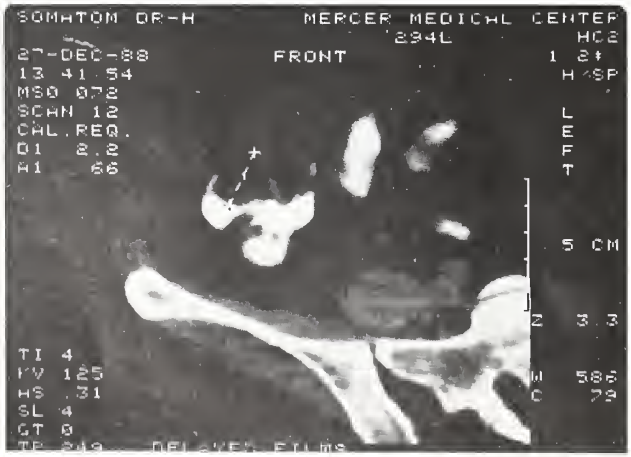

Figure 3. CT scan of the abdomen on patient 2. There is a fat density mass in the region of the ileocecal area.

ENDOSCOPIC AND RADIOLOGIC FINDINGS

On endoscopy, the three polypoid lesions appeared to be covered by a normal, smooth, and

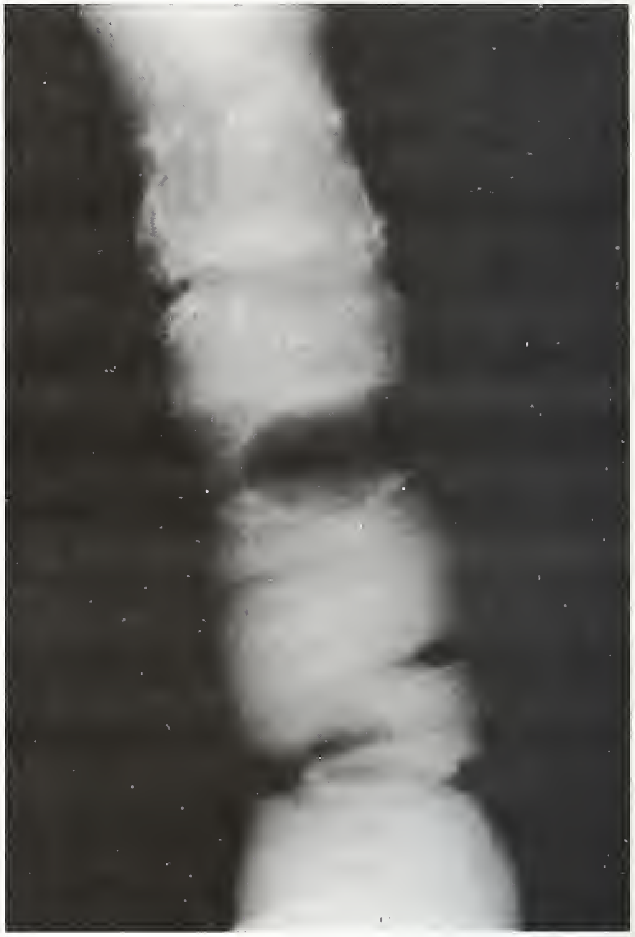

Figure 4. Endoscopic appearance of an ascending colon lipoma on patient 2. As in the two other cases, it is soft and smooth and with a positive "pillow sign."

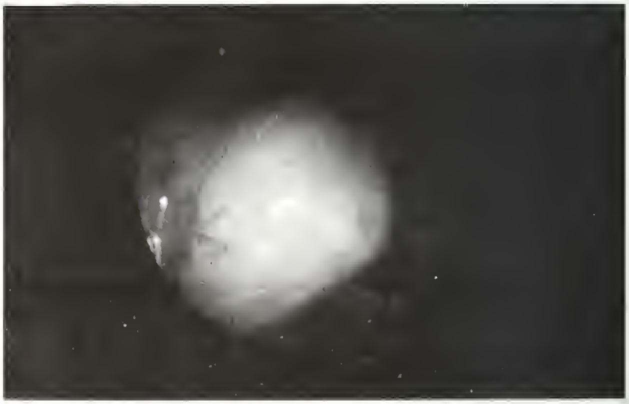

Figure 5. Lipomatous lesion found in the ascending colon of patient 3.

glistening mucosa; biopsy forceps applied to the lesions showed them to be soft and movable. The closed biopsy forceps indented the lesions with ease.

The barium enemas showed comparable findings: growths were smooth and covering mucosa looked intact. CT scans in two cases proved the lesions to have the density of fat.

The Table summarizes the report.

Table. *Clinical, endoscopic, and radiologic characteristics of three patients with colonic lipomas.*

			Colonoscopy				Radiology	
Patient	Sex	Age	Location	Size (cm)	Mucosa	"Pillow Sign"	Barium Enema	CT Scan
1	F	53	Descending colon	1.3 - 1.5	Normal	+	Smooth mass, normal mucosa	Not Done
2	F	77	Ascending colon	1.0 x 1.5	Normal	+	Smooth mass, normal mucosa	Fat Density
3	F	43	Ascending colon	1.0 x 1.5	Normal	+	Smooth mass, normal mucosa	Fat Density

COMMENTS

Lipomas of the colon are uncommon, but represent the second most common benign colonic tumor, second in frequency to the adenomatous hyperplastic polyps.[1] Most lipomas are entirely asymptomatic and found accidentally. Those lipomas large enough to cause mechanical complications may lead to diverse symptoms such as vomiting, palpable mass, or gastrointestinal bleeding.[2] Intussusception and bowel obstruction also may occur and would require surgical treatment.[3]

Colonoscopy and polypectomy now are considered routine procedures. However, morbidity and mortality may occur; transmural burns, bowel perforations, and even explosion of flammable gases have been seen.[4] Thus, morbidity may be avoided should the endoscopist know with a reasonable degree of certainty that the tumor found on a given patient has no potential for malignancy and is causing no symptoms.

The endoscopic characteristics of colonic lipomas are typical enough to make a preoperative diagnosis, even in the absence of histological confirmation; these lesions are smooth, compressible, and covered by normal-looking mucosa. Some lesions may be pedunculated, like the one removed on our first patient, but more frequently the stalk is short and thick.[5] Lesions can be indented easily with a closed biopsy forceps, but on withdrawal of the forceps, they rapidly recover their original shape, much like a foam pillow;[6] hence this has been called the "pillow-sign."

The radiologic appearances also are fairly typical. Barium enema examinations showed smooth polypoid lesions, with sharp borders and configuration. This may change during peristalsis. However, radiological differentiation between lipomas and other submucosal lesions may not be possible by a barium enema alone.

Computed tomography has added a new dimension to the recognition of polypoid lesions of the gastrointestinal tract. Lipomas manifest a low attenuation coefficient indicative of a fat density. Farah and colleagues were able to distinguish lipomas in the duodenum from other lesions in 2 of 14 patients who presented with duodenal neoplasms.[7] Thus, by using endoscopy, conventional barium enemas, and CT scans, physicians may diagnose colonic polyps as being, "most likely, lipomatous in origin." If there are no associated complications (obstruction, intussusception, or gastrointestinal bleeding), there is no reason to remove these lesions. ■

Submitted: October 1989;
Accepted: November 1989.

REFERENCES

1. Taylor BA, Wolf BS: Colonic lipomas: Report of two unusual cases and review of the Mayo Clinic experience, 1976-1985. *Dis Colon Rect* 30:888-893, 1987.

2. Hurwitz M, Redleaf P, Williams H, et al.: Lipomas of the gastrointestinal tract: An analysis of 72 tumors. *Am J Roentgenol* 99:84-89, 1967.

3. Fawaz K, Bloom S, Pappas C, et al.: Adult intussusception presenting with transient intestinal ischemia. *Am J Roentgenol* 73:265-270, 1980.

4. Tedesco FJ: Colonoscopy polypectomy: Complications, in, *Therapeutic Gastrointestinal Endoscopy (First Edition)*. New York, NY, Igaker-Shoin Medical Publishers, 1985, pp 284-286.

5. Wolf BS: Lipoma of the colon. *JAMA* 235:2225-2228, 1976.

6. Khanaja FI: Pedunculated lipoma of the colon: Risks of endoscopic removal. *Southern Med J* 80:1170-1174, 1987.

7. Farah MC, Jafri SZH, Schwab RE, et al.: Duodenal neoplasms: Role of CT. *Radiology* 162:839-843, 1987.

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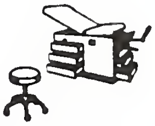

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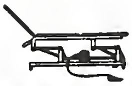

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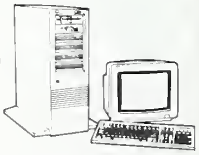

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Clinical Decision Making

Conference on Therapeutic and Diagnostic Options

HOWARD HOLTZ, MD
LEONARD BIELORY, MD
NEIL FREUND, MD
NORMAN LASKER, MD

Clinical decision-making conference will be a new quarterly feature. Suggestions or contributions should be addressed to the authors. The authors discuss a 67-year-old male with coronary heart disease and renal failure.

Dr. Neil Freund (senior resident in internal medicine): A 67-year-old male presented with acute shortness of breath, chest pain, and hypotension. He was diagnosed as having acute pulmonary edema and underwent cardiac catheterization revealing triple-vessel disease. He was transferred to UMDNJ. Upon admission, the patient was asymptomatic. There was a history of diabetes mellitus for 10 years and longstanding hypertension. He smoked one pack of cigarettes per day for many years. His medications on admission were chlorpropamide, nitroglycerin paste, diltiazem, furosemide, and docusate sodium. Blood pressure was 150/90. There was a right carotid bruit. Auscultation of the lungs was normal; there was no jugular venous distention. A left ventricular S4 gallop was heard. The abdomen was nontender and without organomegaly. There was no peripheral edema or skin rashes. A stool specimen was negative for occult blood. Urea nitrogen was 43; creatinine was 2.4 mg/dl; glucose was 301 mg/dl; sodium was 135 mmol; potassium was 4.9 mmol; chloride was 93 mmol; carbon dioxide was 30 mmol; calcium was 10.5 mg/dl; phosphate was 6.0 mg/dl; and albumin was 3.9 gm/dl. The creatine

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kinase was 1898 U and the MB fraction was 1.8 percent. Serum alanine aminotransferase was 31 U and the aspartate aminotransferase was 42 U. Total cholesterol was 276 mg/dl. White cell count was 11,900 with 9 percent eosinophils. The hematocrit was 43.9 percent and the platelet count 257,000. Prothrombin time and partial thromboplastin time were not prolonged. The urine gave a ++++ for glucose, a negative test for blood, and a trace positive test for protein. There were 4 to 8 red cells and 5 to 10 hyaline casts per high-power field. Urine myoglobulin was negative. An electrocardiogram revealed normal sinus rhythm, left ventricular hypertrophy, Q waves in leads II and III, and a-VF and inverted T waves in leads V4-V6. An x-ray of the chest revealed normal heart size and lung fields; there was calcification in the aorta.

On hospital day 2, the patient experienced bilateral calf tenderness. On hospital day 7, the myalgias had progressed and the patient experienced abdominal pain, nausea, and vomiting. A repeat creatine kinase was 1800 U (MB fraction 0.9 percent). An abdominal ultrasound was performed and showed no abnormalities in the kidneys, liver, gallbladder, and pancreas. An upper gastrointestinal series was done and also was normal. On hospital day 10, the urea nitrogen was 63 mg/dl and the creatinine was 4.6 mg/dl. A 24-hour urine creatinine clearance was 10 ml/min. The patient continued to have persistent abdominal pain with nausea; the stool examination remained negative for occult blood. On hospital day 15, a livedo reticularis rash appeared over the lower extremities. The peripheral pulses were unchanged. A renal perfusion scan was performed and showed decreased function and perfusion to both kidneys. The patient became anuric, unresponsive to diuretics, and required hemodialysis. On hospital day 16, the urea nitrogen was 101 mg/dl, and the creatinine was 7.8 mg/dl. A diagnostic procedure was performed.

Table. *Differential diagnosis of skin livedo reticularis.*

Atheromatous embolism
Cryoimmunoglobulinemic syndrome
Lupus erythematosus systemic
Pheochromocytoma
Polyarteritis nodosa systemic
Rheumatoid arteritis
Vasculitis nonspecific allergic
Hypersensitivity vasculitis
Beriberi heart disease
Relapsing polychondritis
Wegener's granulomatosis

Dr. Norman Lasker (director, Division of Nephrology): The first consideration in approaching an azotemic patient is to determine whether the renal insufficiency is acute or chronic.[1-2] This patient had acute renal failure based on the following findings: no previous history of renal disease, a normal hemoglobin of 14.9 gm percent, and a progressive downhill course of renal failure. A measure of kidney size by kidney, ureter, bladder (KUB), or ultrasound should be included to rule out small chronically scarred kidneys.

Acute renal failure can be categorized as prerenal, renal, and postrenal, or obstructive. This patient could have had prerenal failure due to myocardial damage and congestive heart failure, or dehydration secondary to furosemide. However, there was no clinical evidence of heart failure or dehydration and the BUN/creatinine ratio was not increased.

Obstructive or postrenal failure due to prostatic hypertrophy or bladder dysfunction must be considered in a 67-year-old diabetic man with acute renal failure. These could be ruled out by bladder palpation, a normal voiding pattern, and a small postvoiding residual urine volume. It now has become standard practice to perform a renal ultrasound in new patients with renal failure to determine renal size and check for a dilated urinary collecting system. The renal ultrasound in this case was normal.

The elimination of the possibility of obstructive renal disease and prerenal failure leaves us with a patient with acute renal failure due to an intrarenal disease. Intrarenal disease causing acute renal failure can be classified on the basis of the primary anatomical structure involved. It should be understood that more than one structure can be involved, but usually the pathological change in a single anatomic location characterizes the lesion. There are four subdivisions for intrarenal acute renal failure: vascular, glomerular, tubular, and interstitial.

The vascular lesions include embolization or thrombosis of the intrarenal extraglomerular vessels; the glomerular lesions mainly are inflammatory lesions of the glomerular capillaries causing rapidly progressive glomerulonephritis; the tubular lesions include acute tubular necrosis and blockage of the tubules by proteins or urates and the interstitial disease is acute interstitial nephritis, an allergic reaction to drugs such as methicillin.

In the present case, bilateral renal vascular embolization could have originated from a cardiac mural thrombus secondary to a recent myocardial infarction. Since cardiac emboli are large enough to occlude larger intrarenal vessels, they result in areas of infarction which frequently are associated with costovertebral angle pain, microscopic hematuria, and hypertension. A high lactic dehydrogenase (LDH) and relatively normal serum glutamic oxaloacetic transaminase (SGOT) is characteristic of this type of renal embolization, but no LDH was available in this case. The patient did not have costovertebral angle pain or hypertension. Another type of embolic vascular disease which can cause acute renal failure is atheroembolic renal disease in which a severely atheromatous aorta sheds small emboli to the kidney and other organs.[3] Macroscopic polyarteritis produces narrowing or occlusion of the medium-sized renal vessels, but usually does not produce acute renal failure. Hypertension occurs in over 50 percent of the cases and neurological involvement—mononeuritis multiplex—is common. Other vascular lesions which can produce acute renal failure include malignant hypertension with malignant arteriolarnephrosclerosis and hemolytic-uremic syndrome (HUS). The latter includes thrombotic-thrombocytopenic purpura (TTP) and hemolytic-uremic syndrome of children and adults. HUS is characterized by the intravascular deposition of platelets and fibrin, a microangiopathic hemolytic anemia (schistocyte or helmet cells in peripheral blood) and thrombocytopenia. The present patient was not anemic and had no evidence of thrombocytopenia such as purpura.

Glomerular lesions producing rapidly progressive glomerulonephritis are associated with acute renal failure. The pathological lesion is crescentic glomerulonephritis which can be seen in severe cases of postinfectious glomerulonephritis, membranoproliferative glomerulonephritis, Goodpasture's syndrome, microscopic polyarteritis, Wegener's granulomatosis, lupus nephritis, Henoch-Schönlein purpura, and cryoglobulinemia. Rapidly progressive glomerulonephritis can be eliminated from consideration in this patient because of the low degree of proteinuria and the absence of red blood cell casts in the urine.

Tubular lesions including acute tubular necrosis and/or tubular obstruction must be considered in this setting. The renal failure followed a coronary arteriogram suggesting the possibility of contrast dye acute renal failure. Contrast dye-associated renal failure is one type of acute tubular necrosis. It follows intravenous or intra-arterial use of radioopaque dyes. The patients most likely to develop significant acute renal failure after radiocontrast dyes have pre-existing renal failure. Occasionally, an allergic reaction to the dye can be associated with acute renal failure. Increasing azotemia usually is noted one or two days after the administration of the dye, accompanied by a decrease in urine output. Renal failure typically lasts for two to five days with recovery by day seven (bell-shaped curve), and it is uncommon for these patients to require long-term dialysis. The urine sediment shows tubular cell casts and muddy brown coarsely granular casts which are characteristic of acute tubular necrosis.

This patient did not follow the typical "bell-shaped curve" course of nephropathy since his azotemia progressed slowly and continuously over a 15-day period and then reached an elevated level plateau. The patient had no acute allergic manifestations at the time of the administration of the dye, suggesting other causes for the eosinophilia. The benign urine sediment, and the course of the renal failure indicate that radiocontrast dye nephropathy is unlikely in this patient.

Acute tubular necrosis secondary to hypotension preceding the patient's admission to the referring hospital also is unlikely because of the lack of urinary findings, i.e. trace protein with no muddy brown granular casts. The delayed onset of renal failure one week after the hypotensive episode and its prolonged course are not characteristic of acute tubular necrosis.

Rhabdomyolysis can cause acute renal failure due to blockage of the tubules by myoglobin and the tubular toxicity of this muscle protein. Myoglobin is released from the muscle secondary to prolonged coma and muscle compression as seen in narcotic or drug overdosage. It also can be caused by alcoholism, seizures, strenuous exercise, severe viral infections and occasionally severe hypophosphatemia, hypokalemia, or McArdle's syndrome. It should be suspected if the urine dip stick tests strongly positive for blood but the sediment shows only a few red blood cells/HPF. The muscle damage results in a high creatinine phosphokinase (CPK), serum glutamic oxaloacetic transaminase (SGOT), phosphorus, potassium, creatinine, and uric acid. (Expect a high serum creatinine-BUN ratio.) Serum calcium is low in the early stages because of calcium uptake by the damaged muscles and the increased phosphorus level. Although the patient had a high CPK and elevated phosphorus, the urine tested negative for myoglobin and the serum potassium, calcium, and creatinine-BUN ratio were normal.

Acute interstitial nephritis (AIN) usually is a hypersensitivity reaction to drugs such as methicillin, penicillins, sulfa drugs, nonsteroidal anti-inflammatory drugs, rifampin, cimetidine, phenytoin, allopurinol, and many other agents. The interstitial inflammation mainly involves lymphocytes and monocytes, but includes eosinophils, neutrophils, and basophils. It leads to a decreased glomerular filtration rate due to the interstitial edema and vascular compression and also can cause secondary tubular damage. The patient may present with the full-blown manifestations of a hypersensitivity reaction including fever, a maculopapular rash, peripheral eosinophilia, arthralgias, and eosinophiluria, but frequently the latter is the only diagnostic finding. Although the patient had eosinophilia, no eosinophils or white blood cells were noted in the urine. Furosemide which is a sulfonamide derivative is an infrequent cause of AIN.

This case was presented in a weekly House Officer Clinical Decision-Making Conference. The residents are taught to use techniques that make the decision process more explicit and rational. The case under discussion was a differential diagnostic problem that lent itself to an analysis by an artificial intelligence program called Quick Medical Reference. A microcomputer installed with QMR was brought to the conference.

The occurrence of renal failure soon after the passage of an arterial catheter into the coronary ostia of a diabetic man with atherosclerotic disease and the admission findings of eosinophilia and an elevated CPK with scarce urinary findings should suggest atheroembolic renal disease.[4-9] This is associated with severe aortic atheromatous disease and usually occurs following manipulation of the aorta, although it can occur spontaneously. The emboli represent atheromatous hyaline material containing cholesterol crystals. They lodge in small arteries in the kidney, pancreas, spleen, lower extremity muscles, toes, and the retinal vessels. In the latter, they produce bright orange Hollenhorst bodies.[10] The dissolved cholesterol crystals resemble bi-concave parallel slits after fixation. These emboli occlude smaller vessels than do the nonatheromatous emboli so that the involved organs can remain viable, i.e. they produce organ ischemia and fibrosis and not infarction. Therefore, unlike nonatheromatous embolic renal disease, there may be no CVA pain and no hypertension.

The exposure of the atheroembolus to the circulation can result in an immunological reaction associated with eosinophilia and hypocomplementemia, and the urinalysis may be relatively normal. Livedo reticularis, as seen in this patient, is a bluish, lacy discoloration of the skin due to occlusion of the small arterioles and dilation of the capillaries and venules with desaturated blood.[11] The patient's abdominal pain and myalgias may have been due to pancreatic and muscle involvement. The course of the acute renal failure is progressive, reaching a plateau in five to ten days. In most cases, renal insufficiency remains permanently, although an occasional case will improve with time. The long-term prognosis is poor because of the severe atheromatous disease present in these patients. The diagnosis may be confirmed by finding the typical atheroemboli in biopsied muscle, skin, or kidney.[12] The kidney biopsy should be an open one since the vascular involvement is irregular and may be missed in a small specimen.

The presentation and clinical findings in this patient are most compatible with the diagnosis of atheroembolic renal disease.

Dr. Howard Holtz: This case was presented in our weekly House Officer Clinical Decision-Making Conference. The residents are taught to use techniques that make the decision process more explicit and rational.[13-16] The case under discussion was a differential diagnostic problem that lent itself to analysis by an artificial intelligence program called Quick Medical Reference (QMR). A microcomputer installed with QMR was brought to the conference.

In 1972, Myers, Pople, Miller, and coworkers at the University of Pittsburgh set out to develop a computer program which could simulate the role of an expert consultant in internal medicine. This formidable undertaking became the INTERNIST-1 program.[17] An evaluation of the program using cases from clinicopathologic conferences, showed INTERNIST-1 had comparable diagnostic acumen to the attending physicians at a major teaching hospital. However, the program's diagnostic accuracy was not as good as the invited expert clinician.[17] QUICK MEDICAL REFERENCE (QMR) is the successor to INTERNIST-1.[18] Modifications include an emphasis on manipulating the rich knowledge base for educational purposes and use as a diagnostic aid rather than a definitive diagnostic consultant.

The diagnostic algorithms of QMR are based on a well-studied model of the clinical reasoning process;[19-20] however, there are some aspects of differential diagnosis QMR cannot emulate. For example, in this case, Dr. Lasker used the clinical course to rule out radiocontrast dye nephropathy by observing the patient's azotemia did not follow a bell-shaped curve after the dye exposure. QMR cannot yet easily use the temporal sequence of clinical observations in its differential diagnosis. In addition, pathophysiological states such as prerenal azotemia are difficult to integrate into the program without considering them disease entities (Table).

If there are some pitfalls in exactly capturing the human cognitive process of diagnosis, all is forgiven when one observes the program's capacity for teaching. This is best illustrated by participants who asked to use QMR at the end of the conference.

A third-year medical student wanted to know why systemic lupus erythematosus was not chosen as a diagnostic hypothesis. QMR provided the student with a list of the patient's findings that supported the diagnosis of lupus and a longer list of case findings that were not consistent with lupus. It prompted the student with questions such as "ANA positive?" which would be useful in making the diagnosis. Similarly, a resident wanted to know other diseases associated with the rash livedo reticularis. A printout of the ten diseases in QMR's knowledge associated with the rash was produced.

On a more advanced level, an attending physician wanted to know case findings that were common to polyarteritis nodosa and atheromatous embolism since she had considered both in her differential diagnosis. QMR quickly provided her with a list of findings common to both diseases, such as calf muscle tenderness, and gave her the option of having a list of findings which were unique to each disease. She decided to pick several clinical "pearls" to commit to memory to help differentiate these diseases in the future.

The case findings were entered into QMR in 15 minutes, before the conference began. The case analysis took seconds and was done after Dr. Lasker discussed his diagnostic impressions. The readout was: "Potentially Interesting Diagnostic Hypotheses: Atheromatous Embolism, Myocardial Infarction Acute." In this case, the leading diagnosis concurred with Dr. Lasker's assessment and a second hypothesis was offered.

Dr. Neil Freund: The diagnostic procedure was a muscle biopsy of the left posterior calf which revealed cholesterol emboli in the skeletal muscle arterioles, diagnostic of atheroembolic disease.

As there is no specific treatment for this disorder, the patient's care was supportive, including temporary hemodialysis. He began to urinate. Abdominal, dermatologic, and muscle findings resolved and he was discharged. Six weeks later, he was readmitted with chest pain, severe renal failure, lower extremity ulcerations, and cyanosis. He expired shortly after admission. An autopsy revealed atherosclerosis in the ascending aorta, recent myocardial infarction, and fatty change in the liver. In addition, atheroemboli were found in the splenic artery, with splenic infarction, and the renal arterioles. ■

Submitted: May 1989; Accepted August 1989

REFERENCES

1. Lasker N: The diagnosis and treatment of renal insufficiency. *J Med Soc NJ* 63:545, 1966.
2. Burke JF Jr, Lasker N: Acute renal failure in the surgical patient, in *Practice of Surgery*. Hagerstown, MD, Harper and Row Publishers, chapter 17, 1977.
3. Retan JW, Miller RW: Microembolic complications of atherosclerosis: Literature review and report of a patient. *Arch Intern Med* 118:534, 1966.
4. Richards AM, Eliot RS, Kanjuh VI, et al.: Cholesterol embolism: A multiple-system disease masquerading as polyarteritis nodosa. *Am J Cardiol* 15:696-707, 1965.
5. Kassirer JP: Atheroembolic renal disease. *N Engl J Med* 280:812-818, 1969.
6. Rosansky SJ, Deschamps EG: Multiple cholesterol emboli syndrome after angiography. *Am J Med Sci* 288:45-48, 1984.
7. Drost H, Buis B, Hahn D, et al.: Cholesterol embolism as a complication of left heart catheterization: Report of seven cases. *Br Heart J* 52:339-342, 1984.
8. Case Records of the Massachusetts General Hospital Case 30—1986. *N Engl J Med* 315:308, 1986.
9. Fine MJ, Kapoor W, Falanga V: Cholesterol crystal embolization: A review of 221 cases in the English literature. *Angiology* 38:769, 1987.
10. Hollenhorst RW: Significance of bright plaques in the retinal arterioles. *JAMA* 178:23, 1961.
11. Kalter DC, Randolph A, McGavran M: Livedo reticularis due to multiple cholesterol emboli. *J Am Acad Dermatol* 13:235, 1985.
12. Anderson WR: Necrotizing angiitis associated with embolization of cholesterol: Case report with emphasis on the use of muscle biopsy as a diagnostic aid. *Am J Clin Pathol* 43:55-71, 1965.
13. Sox HC: Probability theory in the use of diagnostic tests: An introduction to critical study of the literature. *Ann Intern Med* 104:60-66, 1986.
14. Paulker SG, Kassirer JP: Decision analysis. *N Engl J Med* 316:250-258, 1987.
15. Shortliffe EH: Computer programs to support clinical decision-making. *JAMA* 258:61-66, 1987.
16. Sackett DL, Haynes RB, Tugwell P: *Clinical Epidemiology*. Boston, MA, Little, Brown, 1985.
17. Miller RA, Pople HE, Myers JD: INTERNIST-1, an experimental computer-based diagnostic consultant for general internal medicine. *N Engl J Med* 307:468-476, 1982.
18. Miller RA, McNeil MA, Challinor SM, et al.: The INTERNIST-1/QUICK MEDICAL REFERENCE project—status report. *West J Med* 145:816-822, 1986.
19. Barrows HS, Feltovich PJ: The clinical reasoning process. *Med Educ* 145:816-822, 1986.
20. Shortliffe EH: Reasoning methods in medical consultation systems: Artificial intelligence approaches. *Comput Biomed* 18:5-14, 1984.

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References

1. USP DI Update, September/October 1988, p 120.
2. Br J Clin Pharmacol 1985;20:710-713.
3. Data on file, Lilly Research Laboratories.
4. Scand J Gastroenterol 1987;22(suppl 136):61-70.
5. Am J Gastroenterol 1989;84:769-774.

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In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events was due to the drug.

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Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to three times the upper limit of normal, however, did not significantly differ from that in placebo patients. Hepatitis and jaundice have been reported. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Because cross-sensitivity among this class has been observed, H_2-receptor antagonists should not be administered to those with a history of hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

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Hazards Smokers Impose

K.H. GINZEL, MD

Tobacco smoke is the single most important source of exposure for the nonsmoking population to harmful air pollution. Uptake, biological reaction, and associated pathology document the potential for serious health consequences, raise ethical and legal questions, and demand comprehensive legislative action.

If future generations were to tell the grim mythology of the 20th century, they might allegorize cigarette smoking as a two-headed, poison-spewing hydra. The noxious emanation issuing from one head would be the "mainstream" smoke inhaled by the smoker and responsible for a death toll in the United States alone that exceeds the number of Americans killed in battle or who died of war-related diseases in all wars ever fought by this nation.[1] The toxic effluent exuding from the other head of the formidable monster would symbolize the smoke discharged into the indoor environment between the puffs taken by the active smoker, designated "sidestream" or "secondhand" smoke which amounts nationally each year to an estimated 2.25 million metric tons of gaseous and inhalable particulate matter.[2] Cigarette smoking is unique among the uses and abuses of dependence-producing substances in that it forces the casual bystander to participate in the drug-taking act, because about two-thirds of the total smoke of each cigarette is sidestream smoke. Having to breathe smoke-polluted air is aptly called "involuntary" smoking, a term more accurate than the alternative designation of "passive" smoking.

The analogy of the two-headed snake could be taken one step further. The victorious advance of the cigarette in the last 70 years has spread two types of pollution around the globe: the physical pollution

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of the smokers' lungs and of indoor air spaces across most nations, ultimately finding its way into the nonsmokers' body tissues, and the psychological pollution by public channels of communication with insidious deceptive messages.[3]

Society's reaction to involuntary smoking, as indeed to smoking itself during the past four decades, is characterized by a paradox where apathy and complacency, inaction or insufficient action, lack of governmental concern and regulation, altogether a sort of "business as usual" attitude, are pitted against the mounting evidence of harm and injury and the few determined advocates struggling for change.[4]

In this brief overview, I first address the various health aspects of involuntary smoking, specifically focusing on the predicament of the fetus and child; secondly, I consider the ethical and legal implications; and thirdly, I ask what can and should be done by informed citizens on behalf of the nonsmoking public.

HEALTH ASPECTS OF INVOLUNTARY SMOKING

Only in the last 15 years have reports about the consequences of tobacco smoke exposure of nonsmokers increased from a trickle to a flood, culminating in two recent landmark publications, one by the National Academy of Sciences,[5] and the other by the Surgeon General.[6] Despite attempts of the Tobacco Institute, the lobbying arm of the industry, to denigrate the latter while in part approving the former, the two reports came to identical conclusions: 1) Involuntary smoking is a cause of disease, including lung cancer, in healthy nonsmokers. 2) Children exposed to smoking in the home suffer an increased frequency of respiratory infections and delayed maturation of lung function. 3) Environmental tobacco smoke is the dominant contributor to indoor levels of respirable suspended particulates, and simple separation of smokers and nonsmokers within the same airspace may reduce, but does not eliminate, the exposure of the nonsmoker to environmental tobacco smoke.

Tobacco smoke is not only the dominant indoor air contaminant, but indoor air pollution, largely because of tobacco smoke, consistently exceeds outdoor pollution.[7,8] This discovery surprised those who believed that outdoor levels would determine indoor levels and that cleaning city air would protect human health from the ravages of air pollution. Huge sums of money have been spent to comply with the National Ambient Air Quality Standards, established by the Clean Air Act of 1970, which tacitly were applied to the outdoors, totally ignoring the indoor environment as one in its own right, and where Americans spend about 90 percent of their time.[7,8]

Environmental tobacco smoke. The major source of environmental tobacco smoke is sidestream smoke, for an active smoker retains 90 percent or more of the inhaled mainstream smoke in his body.[5,6] Ambient air monitoring has supplied us with detailed information on both mainstream smoke and sidestream smoke. It is important to realize that essentially the same major poisons and carcinogens are present in sidestream smoke (and environmental tobacco smoke) as in mainstream smoke inhaled by the smoker. Moreover, their concentrations generally are much higher in sidestream than in mainstream smoke and the sidestream/mainstream smoke ratio has increased progressively as the cigarette has evolved from the classical nonfilter type to the modern cigarette with more efficient filtertips and correspondingly lower tar yields for the smoker.[5,6] While the smoker is receiving less poison in the mainstream smoke of modern cigarettes, the nonsmoker actually may be getting more, due to the fact that the total smoke yield (mainstream plus sidestream smoke) of cigarettes with different mainstream tar ratings (regular or ultra-light) remains essentially the same.[9]

Environmental tobacco smoke can reach uncomfortably high concentrations in a variety of enclosed and poorly ventilated air spaces, such as cars, offices, and restaurants. Thus, it has been estimated that a nonsmoker spending only one hour in a smoke-filled bar may be exposed to as much dimethylnitrosamine, a very potent carcinogen, as if he actually had smoked 17 to 35 filtertip cigarettes.[10] During an eight-hour work shift, a nonsmoking bartender might breathe as much carbon monoxide and benzo(a)pyrene, as if he himself had smoked about 36 cigarettes, provided he worked in a poorly ventilated bar, or 12 cigarettes if the room air was exchanged three times in every hour.[11] Even at a public arena, the exposure of nonsmokers to benzo(a)pyrene during a two-hour period was estimated to be equivalent to smoking 8 cigarettes.[12] These astoundingly high exposure estimates for some smoke ingredients reflect their increased concentrations in sidestream as compared to mainstream smoke. While they highlight the predicament nonsmokers experience under somewhat extreme conditions, they apply equally to smokers, who usually take the lion's share of the sidestream smoke from their cigarettes.

Most of the carcinogens in tobacco smoke are contained in the particulates, whose indoor levels have been found to be alarmingly high. If radon gas (trapped in enclosed air spaces in various parts of the country) also is present, it is attracted by smoke particulates and is kept afloat in the air in higher concentrations and for longer periods than in the absence of tobacco smoke.[13] As a consequence, the exposure of the occupants to the radioactive gas increases whenever cigarettes are smoked. Cigarette smoke itself contains radionuclides with sidestream smoke concentrations four times greater than those in mainstream smoke. While a 1.5 pack-a-day smoker may receive an annual dose of 8,000 millirem,[14] "the cumulative effects of repeated exposure to large concentrations of secondhand smoke could result in nonsmokers' exposure exceeding the government-recommended maximum dosage" of 500 millirem.[15]

We must raise awareness through education in an area where craftily engineered illusion, deception, and ignorance have worked hand-in-hand with our natural inclination toward indifference and apathy. It is not easy to accept that what has been viewed as right and normal, is wrong, abnormal, and requires remedial action.

Uptake and biological reaction. Estimates of exposure of nonsmokers to environmental tobacco smoke and its quantification expressed as cigarette equivalents must be made separately for each agent, for sidestream/mainstream smoke ratios differ. Moreover, because of dilution and aging of sidestream smoke, smoking frequency, room size, ventilation, furnishings, and other factors, such calculations yield a rather wide range of results.[6] What ultimately matter are the extent of incorporation of the various chemicals into the body and the biological reactions they engender. There is ample evidence that tobacco smoke components enter the body of the nonsmoker. Nicotine and its metabolite, cotinine, have been detected in the blood, urine, and saliva of large numbers of nonsmokers, providing the most specific, incontrovertible proof that passive exposure to tobacco smoke does indeed lead to absorption of smoke constituents, for tobacco is the only source of nicotine.[5,6] Preliminary evidence also suggests that passive smoking causes increased urinary mutagenic activity which reflects carcinogen exposure.[5,6] Tests to reveal the reaction of carcinogens with DNA, the initiating event in carcinogenesis, already have produced positive results in smokers and now are being extended to screen exposed nonsmokers.[16]

Nicotine causes immediate effects which can be demonstrated in both the active and the passive smoker, the difference being only one of intensity. In brief, nicotine increases the heart rate, particularly in children,[17] constricts blood vessels manifested in a lowering of heat output, e.g. from the hands,[18] and dislodges cells lining the blood vessels.[19] Acute impairment of exercise performance observed during environmental tobacco smoke exposure was attributable directly to the uptake and binding of carbon monoxide to hemoglobin which reduces the oxygen-carrying capacity of the blood.[20] The latter effect may be especially debilitating in patients with compromised cardiovascular or pulmonary function. But even healthy individuals exposed to carbon monoxide concentrations of 30 parts per million and above, caused by smoking in confined spaces, reach carboxyhemoglobin levels at which visual discriminative and psychomotor function begin to be impaired.[21,22]

Most other acute effects of environmental tobacco smoke involve irritation of the delicate tissues of eyes and airways, resulting in itching, tearing, sneezing, wheezing, coughing, sore throat, hoarseness, headache, dizziness, and nausea, which entirely incapacitate about 3 percent of the total population, people with hypersensitivity to ambient tobacco smoke.[7,8]

Unquestionably, the most serious consequence of chronic tobacco smoke exposure is lung cancer, estimated to claim from 2,500 to 8,400 deaths annually in the United States.[5,6,23] The second major effect of chronic exposure to tobacco smoke is the significantly elevated incidence of respiratory illness and middle-ear infections in small children.[5,6,23] It truly is appalling that infants too often are exposed to tobacco smoke and may have more than ten times the amounts of nicotine and cotinine in their urine and saliva than "unexposed" controls[24] who, as with most people today, are not entirely free of nicotine either.[23,25]

Pre- and postnatal involuntary smoking. The fetus is an involuntary smoker receiving tobacco poisons via the blood stream, whether the mother smokes actively or passively. This truly is the ultimate in involuntary smoking. With a smoking mother, a well-defined "fetal tobacco syndrome" has been described, consisting of growth retardation, increased incidence of spontaneous abortions, miscarriages, perinatal mortality, sudden infant deaths, and impairment of emotional and cognitive development, claiming some 4,000 infant lives each year.[26] The most consistent effect of maternal smoking is a reduction in birth weight; two-thirds of this reduction occurs even in children born to environmentally tobacco smoke-exposed mothers.[27] Nicotine passes into the fetal circulation and its major metabolite has been identified in the amniotic fluid of both actively and passively smoking mothers.[28] Both nicotine and carbon monoxide can compromise the oxygen supply to the developing fetus. Cigarette smoking is not only the "most powerful determinant of poor fetal growth in the developed world,"[26] but it also reduces the normal height of children.[29] Low birthweight spells trouble for the health of the baby for at least the first year of life, with more frequent episodes of respiratory ailments and hospital admissions.

Transplacental or early childhood exposure may even increase the risk of cancer in adulthood.[30] Benzene in tobacco smoke increases the risk of leukemia in children almost twofold if one parent smokes, and almost fivefold if both parents smoke. Some 70 percent of the children in this country live in homes with at least one adult smoker.[23] Exposure to tobacco smoke is more harmful in children than in adults, since growing tissue is more vulnerable to carcinogens.

ETHICAL AND LEGAL IMPLICATIONS

The standard reference book, *Clinical Toxicology of Commercial Products, 5th Edition,* assigns nicotine a toxicity rating of 6, "super toxic," the highest designation of toxicity, and describes nicotine as "one of the most toxic of all poisons acting with great rapidity."[31] This poison enters the body of everyone exposed to environmental tobacco smoke. With one-third of the nation still smoking, it is difficult to find someone with no nicotine in his blood. Yet, nicotine is only one among "a total of 4,720 compounds" found in tobacco smoke. Containing 13 billion particles per cubic centimeter, tobacco smoke is "one of the most highly concentrated aerosols known." It is "10,000 times more concentrated than the aerosol resulting from automobile pollution at rush hour on a freeway."[32]

Right of the nonsmoker. Putting aside the issue of bodily harm, should the nonsmoking majority of the population tolerate exposure to air polluted by the smoking minority? Do nonsmokers have to have nicotine in their blood? Do they have to inhale cyanide, carbon monoxide, acrolein, formaldehyde, arsenic, benzene, nitrosamines, radionuclides, and the thousands of other poisons and carcinogens contained in a daily average dose of 1.4 milligram of particulates and a large amount of gaseous matter[24] which, as the tobacco industry asserts, may cause the "healthy nonsmoker" only "transitory discomfort," but "no serious harm" or "lasting adverse health effects?"[33] Is there such a thing as the right of a citizen to unadulterated air in places where he has, or simply wants, to be? Lower federal courts have decided that there is no constitutionally protected right to breathe air that is free from tobacco smoke contamination, yet the United States Supreme Court never has ruled directly on this issue.[34]

Curiously enough, these questions rarely are asked. Perhaps they have no place in our technological civilization where science, pretending to be neutral, is nevertheless the acknowledged arbiter of social issues. A case in point is the proposition that nonsmokers have to document, with "irrefutable scientific evidence," to have sustained physical injury, before public policy measures should even be considered.[35] The grotesque subversion of common sense can even maintain that the "changes in airway function reported for environmental tobacco smoke exposure have not been proved to have any physiologic or clinical consequences."[35] The role of science in public health matters is not to seek exhaustive final proof, but to gather sufficient evidence to justify political action. The evidence for the potential harm of involuntary smoking is compelling,[5,6] and comprehensive legislative measures to protect the public are overdue. Widely scattered local and regional smoking regulations have been slow in coming and have been achieved in piecemeal fashion and only by battling against the fiercely defended tobacco interests. While public attention has been preoccupied by chemical hazards of minor importance, e.g. saccharin, whose carcinogenic potency is 1/50,000 that of a single constituent, benzo(a)pyrene, in cigarette smoke, tobacco has been cunningly steered through perilous rapids and continues to pollute us.

Where do we go from here?

Legal recourse. Those few who were desperate enough to turn to the courts for relief because workplace smoking conditions caused them acute physical distress found that their options were limited.[7,8,34] If the nonsmoking plaintiff succeeds in demonstrating that tobacco smoke is harmful both to himself and to other nonsmokers, the court might recognize the employer's common law duty to provide the same safe and healthful working conditions accorded sensitive electronic equipment, in whose vicinity smoking strictly is prohibited. Failing this, the employee might qualify for "handicapped" status under the Federal Rehabilitation Act of 1973 and receive the privileges decreed by the Act, be awarded disability retirement, or quit the job and earn unemployment compensation. However, the possibility of being fired must not be ignored. These latter options could label a normal, healthy individual, whose only "shortcoming" is to be unable to function in a smoke-polluted environment, as incapacitated and abnormal, reflecting today's twisted values. In case the plaintiff finally decides to sue for damages, the company can claim immunity under the Workers' Compensation Act, which denies compensation for tobacco smoke exposure since the latter qualifies neither as an "injury" nor as an "occupational disease."[34]

Future prospects. At this juncture, a realistic appraisal of our present state of affairs is in order. Is public health policy, in fact, an issue of health based on scientific evidence? If so, why is action not commensurate with current knowledge? Except for some members of the legal professions and a few starry-eyed scientists who still believe in the Newtonian fairytale of simple causation, no one doubts that the link between smoking and disease has been firmly established. Hence, the perennial battle cry for more research and proof is a sham. The Tobacco Institute's disparagement of Dr. Everett Koop's *Report on Involuntary Smoking,* alleging that it constitutes "a direct threat to scientific integrity" and an "attempt to stifle free speech and academic freedom,"[36] is shameless deceit aimed at confusing the general public and legislative bodies. The Institute's rally to uphold the smokers' inviolate right to smoke has an equally hollow sound. The whole issue, in short, is not one of health, biomedical science, and freedom of choice, but one of profit at any price. The multinational tobacco oligarchies and their mercenaries care for people's health and liberties only to the extent that their victims survive long enough to boost the consumption of the deadly merchandise. Dispelling myths and facing facts will be the indispensable first steps to educate the public and prepare for rational action.

A fundamental change in our health policy could be achieved simply by eliminating favoritism, dishonesty, and double standards when dealing with chemical products. If tobacco and tobacco smoke were subjected to the same legal scrutiny as most other hazardous substances, the ensuing regulatory decisions would swiftly clear and clean the air. Section 112 of the Clean Air Act calls for regulation of pollutants which reasonably may be anticipated to result in an increase in mortality or an increase in incapacitating reversible illness.[7,8] This ruling seems tailormade to deal with tobacco smoke. Its historical application by the Environmental Protection Agency (EPA) to outdoor control probably is due to the incorrectly made assumption that outdoor air composition determines indoor air quality. Nowhere in the law is it specified that it cannot be applied to the indoors. Indoor violation of air quality standards for a number of substances occurs frequently and would trigger an immediate pollution alarm if it happened in the outdoor environment. Since smoking is the major culprit, a simple smoking ban in indoor public and workplaces could solve a complex pollution problem with one stroke. All that is needed is a comprehensive federal ruling and its enforcement. Getting it on the agenda and eventually getting it passed necessitates a widespread, concerted, tirelessly repeated effort by the American citizenry, led by a determined health professional community. According to several opinion polls, even many smokers favor smokeless places;[37] their cooperation also could be enlisted.

Since so much time is spent by Americans in occupational settings, the Occupational Safety and Health Administration (OSHA) which regulates the workplace, is the logical target for legislative action. Enclosed public areas are workplaces for those who maintain them. The general duty clause of the Occupational Safety and Health Act of 1970 states in Section 5(a): "Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." To fulfill this mandate, the problem of smoking would have to be addressed, yet OSHA so far has dodged its responsibility.[38] A recent citizen petition to classify tobacco smoke as a potential occupational carcinogen—the International Agency for Research on Cancer has designated tobacco smoke as a human carcinogen[39,40]—was denied by OSHA by stating in reply that "tobacco smoke is not one of the priority substances that OSHA has identified for consideration in the development of standards" and that tobacco smoke is not an agency priority because "tobacco smoke is not generated by an industrial process."[41]

Without action at the federal level, smoke-free public places will emerge in a slow, laborious, and haphazard fashion. Individual businesses so far have been in the forefront, having discovered that going smoke-free brings substantial monetary rewards.[42] Hospitals seem to be last. It is a tragic irony that all hospital-acquired flame burn deaths in California resulted from cigarette-ignited fires.[43]

CITIZEN ACTION

What can an informed citizenry do to reduce the widespread tobacco smoke pollution and its adverse health effects? We must raise awareness through education in an area where craftily engineered illusion, deception, and ignorance have worked hand-in-hand with our natural inclination toward indifference and apathy. It is not easy to accept that what has been viewed as right and normal, in fact, is wrong, abnormal, and requires remedial action. Educational efforts should start in kindergarten and continue throughout the school years. It is imperative that tobacco be included, in content as well as by name, in all projects and programs currently restricted to "drugs and alcohol." Health professional education on tobacco, which presently is inadequate,[44] should prepare doctors and nurses for determined action on an individual basis as well as in the public arena. Smoking has emerged not only as the single most important preventable cause of premature disease and death in our society but also as the single most important preventable source of exposure of the nonsmoking population to harmful indoor air pollution.

The overriding goal should be the elimination of tobacco smoke from all enclosed air spaces where nonsmokers and smokers mix. The most expedient way to achieve this objective would be by a federal statute covering all enclosed workplaces, schools, daycare centers, health care facilities, and public areas across the nation. This could be achieved by mandating an indoor air quality standard to reduce carcinogenic risk to the maximum level of 1 in 100,000 considered acceptable by federal regulatory agencies for environmental carcinogens in air, water, or food.[45] Elimination of tobacco smoke exposure in private homes must be left to individual initiative. A ban on smoking in the automobile, where high exposure is possible, has been recommended by a British member of parliament who views the distraction of lighting a cigarette as a cause of traffic accidents.[46] No-smoking must be made the norm without posting signs, while physically separate smoking areas should be so designated. Thus, instead of allowing smoking unless specifically forbidden, the general rule would be that smoking is prohibited unless specifically allowed. This "rule-switching" approach, which was first implemented in Finland,[47] would go a long way toward debunking the myth that smoking is normal behavior.

Before we can clear the air of tobacco smoke, we will have to remove the smokescreen that powerful tobacco interests have laid across this nation. Any hostility between smokers and nonsmokers is intentionally stirred and exaggerated by inflammatory language in industry-controlled publications. We should win the smoker as an ally on the side of reason and responsibility. In a dispassionate analysis of the question of rights, one can persuasively argue that while the right of the smoker to smoke may cause injury to the nonsmoker, the right of the nonsmoker for smoke-free air will not harm the smoker.

CONCLUSION

The toll of suffering and dying exacted from untold millions of smokers around the globe is tragic enough, but we now have compelling evidence that smoking leaves a trail of disease and death also among nonsmokers who are exposed to the poisons and carcinogens discharged by billions of smoldering cigarettes in enclosed air spaces. The resulting indoor air pollution far exceeds the safe air quality standards which, as yet, have been applied only to the outdoor environment. Involuntary exposure to tobacco smoke is not a mere health issue but provokes serious ethical questions. In an editorial in *The New York Times* in March 1985, Dr. William G. Cahan identified smoking as the most prevalent form of child abuse.[48] Tobacco industry's spokespersons maintain that adverse health effects have not been demonstrated for environmental tobacco smoke exposure[49] as they persist in their denial that smoking itself causes cancer, emphysema, and heart disease.[50,51] For them, neither active nor passive smoking is truly an issue of health, scientific proof, freedom of choice, or individual right, but simply a poorly disguised matter of making money.

Thanks to dedicated individual and group initiatives, progress has been achieved in raising public awareness and restricting smoking to protect the nonsmoker.[52] However, the investment of time and effort has not been matched by results, due to the formidable opposition by tobacco interests. Duplicity in governmental policy also has impeded progress. Tobacco industry's maneuverings are calculated to ride out the current wave of health-promoting reforms, anticipating another calm period of conspicuous consumption. We must be on guard not to let the present propitious momentum subside. In this author's opinion, the time has come to proceed from the slow advance of local skirmishes so aptly led by the nonsmokers' rights movement,[52] to a much broader offensive at the federal level.

The benefits of such a policy to society will be many. Exposure of nonsmokers to tobacco smoke will decrease; smokers will smoke less or decide to quit; quitters will be more successful and less prone to relapse; greatly decreased visibility of smoking will attract fewer young people to the ranks of smokers; cigarette-induced fires and burn injuries will dwindle; employers and building administrators will reap large savings in maintenance and insurance costs. Within the next 30 years, for the first time in a century, cancer rates will diminish.

The present situation is clear. The accumulated evidence is sufficient not only to suggest but to mandate public health measures. Waiting for additional injury before action is taken is unthinkable in a civilized society. Being exposed to the smoke of others differs from actively smoking only in intensity of exposure. Hence, not granting the nonsmoker a smoke-free space is tantamount to making smoking mandatory for everyone. ■

Submitted: May 1989;
Accepted: September 1989

REFERENCES

1. Pollin W:Tobacco addiction and tobacco mortality. *JAMA* 252:2849-2854, 1984.

2. Repace JL: The problem of passive smoking. *Bull NY Acad Med* 57:936-946, 1981.

3. Warner KE: *Selling Smoke: Cigarette Advertising and Public Health.* Washington, DC, American Public Health Association, 1986.

4. Ginzel KH: The fight against the cigarette epidemic. *J NYS Council Social Studies* 25:SSR37-41, 1988.

5. National Research Council: *Environmental Tobacco Smoke in the United States.* Washington, DC, National Academy Press, 1986.

6. Surgeon General's Report: *The Health Consequences of Involuntary Smoking.* US DHHS (PHS), 1986.

7. Repace JL, Lowrey AH: Indoor air pollution, tobacco smoke, and public health. *Science* 208:464-472, 1980.

8. Repace JL: Risks of passive smoking, in Gibson M (ed), *To Breathe Freely.* New York, NY, Rowland and Allanheld, 1985, pp. 3-30.

9. Rickert WS, Robinson JC, Collinshaw N: Yields of tar, nicotine, and carbon monoxide in the sidestream smoke of 15 brands of Canadian cigarettes. *Am J Public Health* 74:228-231, 1984.

10. Brunneman KD, Adams JD, Ho DPS, Hoffmann D: The influence of tobacco smoke on indoor atmospheres. II. Volatile and tobacco-specific nitrosamines in main- and sidestream smoke and their contribution to indoor pollution. Fourth Joint Conference on Sensing of Environmental Pollutants. *Am Chem Soc,* Washington, DC, 1977, pp. 876-880.

11. Cuddeback JE, Donavan JR, Burg WR: Occupational aspects of passive smoking. *Am Ind Hyg Assoc J* 37:263-267, 1976.

12. Elliott LP, Rowe DR: Air quality during public gatherings. *J Air Pollut Control Assoc* 25:635, 1975.

13. Bergman H, Axelson O: Passive smoking and indoor radon daughter concentrations. *Lancet* 2:1308, 1983.

14. West S: The incident on Almeda Street that became North America's worst radioactive accident. *Science* 5:28-37, 1984.

15. O'Hara JH: Radioactivity and cigarette smoke. *NY State J Med* 83:1370, 1983.

16. Hoffmann D, Adams JD, Brunneman KD: A critical look at N-nitrosamines in environmental tobacco smoke. *Toxicol Lett* 35:1-8, 1987.

17. Luquette AJ, Landiss CW, Merki DJ: Some immediate effects of a smoking environment on children of elementary school age. *J Sch Health* 40:533-536, 1970.

18. Gershon-Cohen J, Borden AGB, Hermel MB: Thermography of extremities after smoking. *Br J Radiol* 42:189-191, 1969.

19. Davis JW, Shelton L, Watanabe IS, Arnold J: Passive smoking affects endothelium and platelets. *Arch Intern Med* 149:386-389, 1989.

20. McMurray RG, Hicks LL, Thompson DL: The effects of passive inhalation of cigarette smoke on exercise performance. *Eur J Appl Physiol* 54:196-200, 1985.

21. Russell MAH, Cole PV, Brown E: Absorption by nonsmokers of carbon monoxide from room air polluted by tobacco smoke. *Lancet* 1:576-579, 1973.

22. Stewart RD: The effects of low concentrations of carbon monoxide in man. *Scan J Resp Dis* (Suppl) 91:56-62, 1975.

23. Fielding JE, Phenow KJ: Health effects of involuntary smoking. *N Engl J Med* 319:1452-1460, 1988.

24. Greenberg RA, Haley NJ, Etzel RA, Loda FA: Measuring the exposure of infants to tobacco smoke. *N Engl J Med* 310:1075-1078, 1984.

25. Wald N, Ritchie C: Validation of studies on lung cancer in nonsmokers married to smokers. *Lancet* 1:1067, 1984.

26. Nieburg P, Marks JS, McLaren NM, Remington PL: The fetal tobacco syndrome. *JAMA* 253:2998-2999, 1985.

27. Rubin DH, Leventhal JM, Krasilnikoff PA, Weile B, Berget A: Effect of passive smoking on birthweight. *Lancet* 2:415-417, 1986.

28. Smith N, Austen J: Tertiary smoking by the fetus. *Lancet* 1:1252, 1982.

29. Rona RJ, Florey CV, Clarke GC, Chinn S: Parental smoking at home and height of children. *Br Med J* 283:1363, 1981.

30. Sandler DP, Everson RB, Wilcox AJ, Browder JP: Cancer risk in adulthood from early life exposure to parent's smoking. *Am J Public Health* 75:487-489, 1985.

31. *Clinical Toxicology of Commercial Products, 5th Edition.* Baltimore, MD, Williams and Wilkins, 1984.

32. Dube MF, Green CR: Methods of collection of smoke for analytical purposes. *Recent Advances Tobacco Science* 8:42-102, 1982.

33. Tobacco Institute: *Smoking and Health 1964-1979: The Continuing Controversy.* Washington, DC, 1979, pp. 13-33.

34. Paolella RL: The legal rights of nonsmokers in the workplace. *Univ Puget Sound Law Review* 10:591-632, 1987.

35. Huber GL: Letter to the editor. *N Engl J Med* 303:392, 1980.

36. Marshall, E: Tobacco science wars. *Science* 236:250-251, 1987.

37. Survey of attitudes towards smoking. *Smoking and Health Reporter,* January 1986.

38. Kotin P, Gaul LA: Smoking in the workplace: A hazard ignored. *Am J Public Health* 70:575-576, 1980.

39. Vainio H, Hemminki K, Wilburn J: Data on the carcinogenicity of chemicals in IARC monographs. *Carcinogenesis* 6:1653-1665, 1985.

40. Ginzel KH: The "defect" in tobacco: A biomedical analysis. *Tobacco Product Litigation Reporter* 2.5 TPLR 5.63-5.76, 1987.

41. Smoking: OSHA denies citizen petition to regulate workplace tobacco smoke. *Occupational Safety and Health Reporter, Current Report.* The Bureau of National Affairs, Inc., Feb. 25, 1987, pp. 1022-1023.

42. Martin MJ, Fehrenbach A, Rosner R: Ban on smoking in industry. *N Engl J Med* 315:647, 1986.

43. Bongard FS, Ostrow LB, Sacks ST, et al.: Fatal hospital-acquired burns. *JAMA* 252:2813, 1984.

44. Ginzel KH: The underemphasis on smoking in medical education. *NY State J Med* 85:299-301, 1985.

45. Repace JL, Lowrey AH: An indoor air quality standard for ambient tobacco smoke based on carcinogenic risk. *NY State J Med* 85:381-383, 1985.

46. Johnston P: Squeezing the smoker. *Br Med J* 292:215, 1986.

47. Roemer R: *Legislative action to combat the world smoking epidemic.* World Health Organization, Geneva, 1982.

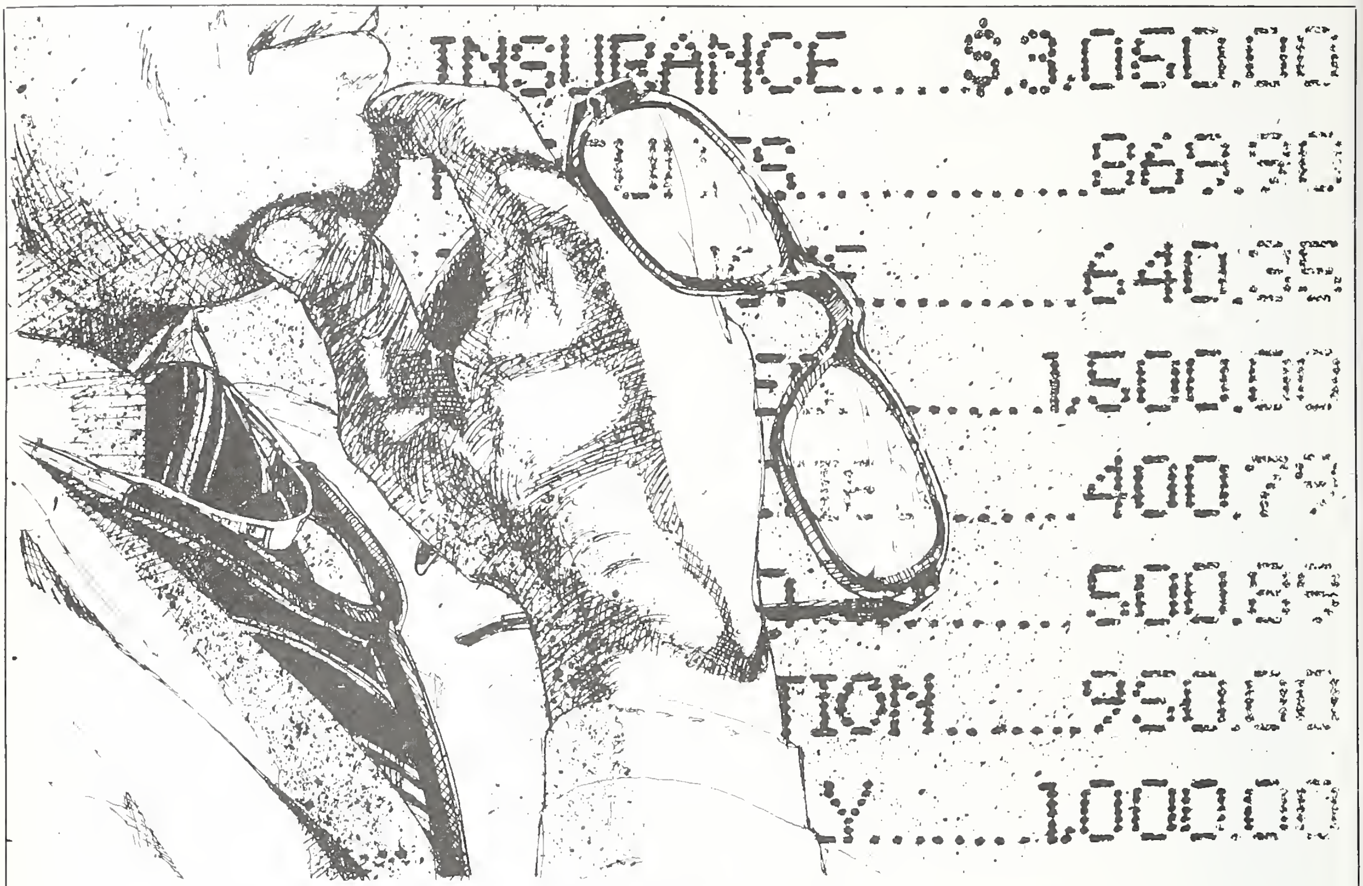
48. Cahan WG: Abusing children by smoking. *The New York Times,* March 9, 1985.

49. Conference on the experimental toxicology of passive smoking, Essen, Germany, 1986. *Toxicol Letters* 35:1-168, 1987.

50. Kornegay HR: The cigarette controversy. *Engage/Social Action,* September 1980, pp. 27-31.

51. Interview of Gerald H. Long, President of R.J. Reynolds Tobacco Co. A loyalist views tobacco's fate. *Insight,* May 19, 1986, p. 15.

52. Glantz SA: Achieving a smokefree society. *Circulation* 76:746-752, 1987.



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Idiopathic Chronic Fatigue

A Primary Disorder

ROBERT J. VAN AMBERG, MD

Idiopathic chronic fatigue, an entity worthy of attention, understanding, and treatment, has disappeared from medical and psychiatric publications. Nonetheless, it is an important clinical phenomenon.

Inexplicable, disabling fatigue, chronic and resistant to treatment, is a troublesome medical and psychiatric problem. Nineteenth-century treatises by Beard,[1-4] Mitchell,[5] daCosta,[6] and Burr[7] make clear that chronic fatigue syndromes were common, their causes speculative, and treatment difficult. Their terms, "neurasthenia," "nervous exhaustion," "chronic fatigue," and "neurocirculatory asthenia" have been used interchangeably to the present time to label a variety of functional organ system disorders and emotional states that share swift fatigability and unknown etiology.

In the 20th century, the most popular term, "neurasthenia," was stripped of all symptoms except fatigue and became synonymous with it.[8,9] But excessive fatigue by any name had become of so little diagnostic value in both psychiatry and medicine that neurasthenia had no listing in the American Psychiatric Association's first *Diagnostic and Statistical Manual (DSM)* in 1952[10] and lost its place in the indices of medical textbooks.

Neurasthenia returned to *DSM II* in 1963[11] in deference to the continued use of the term in Europe,[8] but with *DSM III* in 1980,[12] fatigue as a phenomenon in its own right disappeared. It was assigned to other disorders such as depression and anxiety.

In the meantime, fatigue—not ascribable to any identifiable disease—was deemed by medicine to be psychological or emotional; thus, it was left to psychiatry. Presumably, if some new disease was found that seemed to account for hitherto unexplainable fatigue, that disease would become medicine's responsibility. Accordingly, over the past few decades, textbooks of medicine gradually have dropped chronic fatigue per se from consideration. Standard textbooks of medicine reserve fatigue to clearly diagnosable diseases.[13-15]

Chronic inexplicable fatigue never has ceased being a problem in clinical practice, as evidenced by sporadic contributions to the medical press.[16-32] Hart, in French's *Index of Differential Diagnosis,* after stating that there is "no end of medical disorders that may cause fatigue," lists unhappiness, boredom, overwork, being overwrought, and excess physical and mental activity as nonillness causes.[33] This suggests that fatigues unrelated to identifiable disease still may be of concern to medicine.

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Halberstam, in Conn's *Current Diagnosis, 7th Edition,* is more vigorous in his view that fatigue is medicine's responsibility.[34] Charging that medicine has neglected the problem, he writes, "If you would like to know the epidemiology and differential diagnosis of fatigue as the presenting symptom in office practice, don't bother checking the standard medical literature. I have, and it is worthless. There is no more telling indictment of academic medicine and its separation from the real world of patient care than the articles listed under 'fatigue' in *Index Medicus.* . . . There is next to nothing on fatigue in clinical practice . . . from 1966 to 1978 not a single article appeared with any actual data on the outcome of tired patients." The same can be said for 1979 through 1987.

Halberstam and his two colleagues resolved to "remedy this lack." They gathered data on a large number of patients tired for over one month (some for over two years), and all, but a few "rarities," without discernible illness. Thus, they join the scattering of physicians who have drawn attention to the problem.[29-32]

A few years ago, chronic fatigue as an important symptom received renewed recognition by way of Epstein-Barr virus (EBV) testing. With the means to measure titers of EBV antigens and antibodies, attempts have been made to correlate these findings with signs of disease.[35-38] Since it is well known that extraordinary fatigability is a prominent feature of infectious mononucleosis, an EBV viral infection, it has seemed logical to test chronic fatigue patients for such an infection. As a result, tired persons with equivocal EBV titers have appeared in substantial numbers, the source of their fatigue still in question.

Current interest in the fatigue-EBV complex illustrates the difficulties medicine has in coming to grips with chronic fatigue. Since fatigue is accepted only as a manifestation of a disease, either identifiable now or to be recognized eventually, clinical attention is directed to that particular disease's symptom complex and a search is made for its etiology. Thus, investigation of fatigue itself is precluded.

Psychiatry also has set fatigability aside by locking it into several separate syndromes.[12] As with the medical model, it is assumed that treatment of the syndrome is sufficient for the associated fatigue and that concern for fatigue itself is irrelevant.

The changing perspective of chronic fatigue over the past few decades from primary disease to secondary factor of some other disease brings us to an awkward clinical point. Most patients regard their inexplicable fatigability as probably harmless but sorely frustrating, physical in nature, especially puzzling in its persistence. At the same time, physicians facing the problem have no sure way to understand and assess fatigue beyond the intensity of the patient's complaint. There is no standard treatment. In fact, there is doubt that fatigue is treatable medically or even that it should be treated. Referral to psychiatric care is not a reasonable way out unless a patient has prominent emotional symptoms. As patients continue to press their complaint on physicians insufficiently prepared to treat it, it becomes evident that idiopathic chronic fatigue should be reconsidered and closely examined.

CONCEPT OF IDIOPATHIC CHRONIC FATIGUE

Reconsideration starts with the development of a concept of idiopathic chronic fatigue, and an appropriate starting point is the patient's complaint. It may be expressed subjectively (as feeling tired), behaviorally, or physiologically, implying an abnormal condition.

These three aspects of fatigue have made a simple concept of clinical fatigue difficult to form. As popularly used, fatigue means feelings of at least a few different kinds and impairments of numerous mental abilities, motor skills, and particular powers. Subjective fatigue rarely corresponds closely to the fumbling and mistaken actions said to be due to fatigue. Although loss of energy is thought to be the reason for being tired, there is no recognized pathophysiologic evidence to support the idea. Medicine and psychiatry, by using fatigue in its colloquial sense, are caught up in its confusion.

To cut through the confusion and to clarify the clinical problem, a definition of fatigue in its usual sense is a necessary first step. This definition must include fatigue's subjective, behavioral, and physiological aspects in the contexts of generally accepted fatigue, such as: physical fatigue, mental fatigue, emotional fatigue, general or "overall" fatigue; objectively specified muscular fatigue and more localized fatigues such as tired back, tired legs, and tired eyes; and the categorically different sleepiness and the fatigue of boredom. An all-inclusive definition may read: "Fatigue is a condition, manifested by various vague, disagreeable feelings and/or diminished abilities, brought on by prolonged or strained effort, and corrected by cessation of that effort." To this general statement, several corollaries should be added: the disagreeable feelings may be of all voluntary functions or may be limited to certain muscle groups, sensory systems, and/or particular intellectual functions; these disabilities may be barely appreciable or virtually immobilizing; and recovery may be almost immediate upon cessation of the strained effort or may be delayed a day or two.

This definition is designed to cover fatigues that are experienced universally and without undue personal concern; it does not cover the fatigue patients see as worrisome and different, where patients experience unduly swift onset of discomfort and disability after the start of activity. The subjective factor is intensified; the fatigue feels unusually disagreeable. More functions are impaired, and for all activities, stamina is reduced sharply. Recovery of energies is long delayed and incomplete.

Therefore, pathological fatigue may be defined by a modification of our basic definition: “Pathological fatigue is a condition manifested by various vague, exceptionally unpleasant feelings, and/or extraordinarily diminished abilities, brought on by moderate or slight effort, and not corrected in a reasonable time after stopping the activity.”

> ***Fatigue is a condition, manifested by various vague, disagreeable feelings, that may be limited to certain muscle groups, sensory systems, and/or particular intellectual functions; these disabilities may be barely appreciable or virtually immobilizing; and recovery may be almost immediate upon cessation of the strained effort or may be delayed a day or two.***

Our particular concern, idiopathic chronic fatigue, is a special case of pathological fatigue having two additional features: its cause is unknown or at best speculative, and duration is much prolonged.

While our definitions of pathological fatigue and idiopathic chronic fatigue may spell out component parts and features that distinguish it from nonillness fatigue, they are of no practical help clinically. They give as much importance to subjective aspects as they do to objective behavioral aspects. The clinical problem is diffusely unfocused. Further, the implication of some physiological abnormality, possibly several different kinds, leads nowhere.

FATIGUE-ASSOCIATED CONDITIONS

The suspicion that there may be different fatigue states arises from the recognition that different diseases are associated with different patterns of fatigue. The fatigues of infections of the upper respiratory tract and of the gastrointestinal tract are hardly remarkable; recovery from these infections usually brings a quick return to normal strength and stamina. A different pattern is illustrated by notoriously tiring infections such as hepatitis, moderately severe infectious mononucleosis, and swiftly recurring upper respiratory infections. Energy return may be delayed for a year or more after all clinical and laboratory signs of illness have reverted to normal. Some patients insist years later that they never did fully recover from these particular illnesses.

Common surgical procedures may cause a range of energy aberrations.[39] Operations such as cholecystectomy and hysterectomy, even herniorrhaphy, may cause some patients weakness and weariness for a week or two. Others suffer for several months.

Trauma victims have exhibited a similar spectrum of fatigability. The seemingly same injuries sustained in an automobile accident may not fatigue some persons at all, and others may be invalid by exhaustion for months or years.

Pregnancy and parturition also pose fatigue and weakness problems. It is expected that a prolonged, difficult labor may cause an exhausted, wearied condition for weeks, if not months; for some, the return of energy may take years. Numerous, closely spaced pregnancies are expected to drain most women, but there are those who become irreparably fatigued after two or three well-spaced, normal pregnancies.

The abnormally severe and prolonged fatigues of these particular medical, surgical, and obstetrical patients are clinically indistinguishable from one another. In none is the failure to regain strength understood, and as the origins of the conditions are lost sight of over time, the patients tend to be placed in the categories of emotional disorders. There is good reason for this because their illnesses are indistinguishable from chronic fatigue states that have no plausible origin—fatigues of psychiatric syndromes.

While medicine may feel it has completed its work by referring undiagnosable fatigue patients to psychiatry, psychiatry has been undergoing an uncertain struggle over what to do. After decades of being a major part of, even the essence of “neurasthenia,” chronic fatigue made a tentative appearance as a physiologic abnormality with *DSM I* in 1952.[10] The term received primary disorder status as “psychophysiologic nervous system reaction,” a label that never gained acceptance. Eleven years later, it was replaced by a resurrected “neurasthenia” in *DSM II.*[11] But “neurasthenia” no longer was useful, because psychiatry held fatigability to be a manifestation of anxiety and depressive disorders.[8,9] Since this change was not yet officially recognized, during the term of *DSM II* (1963-1980), chronic fatigue for all practical purposes disappeared. It returned in *DSM III* to be seen as a consequence of or part of several disorders: major depressive episode, dysthymic disorder, and general anxiety disorder.

By placing chronic fatigue within the major depression syndrome, psychiatry gives a strong indication that it is a physiological phenomenon. Among the symptoms that may permit such a diagnosis is “fatigue or loss of energy every day.”[6] The manual’s narrative points to a "decrease in energy level—a sustained fatigue." Dysthymia also may be characterized by "low energy level or fatigue." Generalized anxiety disorder subgroup "motor tension" lists easy fatigability as one of four possible symptoms needed to establish a diagnosis.

DSM III—Revised brings back classical neurasthenia with a new name, undifferentiated somatoform disorder.[40] The diagnosis may be made with "one or more physical complaints, e.g. fatigue, loss of appetite, gastrointestinal or urinary complaints . . . anxiety and depressed mood are common." Since one symptom is sufficient for the diagnosis, fatigue appears to have forced its way back as a primary phenomenon, although camouflaged by another designation not likely to become popular.

WORKING DEFINITION

These medical, surgical, obstetrical, traumatic, and psychiatric fatigues may be proved to have a common pathophysiology. But this is as uncertain as their etiologies. Therefore, clinicians now must do with as clear a symptomological concept as possible that renders chronic fatigue objective and manageable. The definitions formulated above, with their mix of subjective, behavioral, and physiological features should be examined as a logical next step for the possible extraction of a single factor that could be regarded as the essence of fatigue.

The subjective complaint cannot be that factor because, as with any report of a subjective experience, feelings are difficult to identify and appraise. One person's sensations can be compared to another's only approximately and with great uncertainty.

Assessment of a particular patient's fatigue state by clinical observation also is unreliable. A patient may appear and sound tired, but in a short while may change and look and sound well. Or he may appear very well at the physician's office only to be very tired everywhere else.

To attack the problem at a physiological level may seem a possible approach, since the loss of power to maintain a particular level of performance and an inability to recover strength in an expected time imply an energy deficit or some other physiological disorder. But the clinical phenomenon is so varied in form and extent that no characteristic biochemical abnormalities have been identified with any certainty.

The "diminished abilities" aspect of fatigue cannot be used as the essential factor because whatever particular ability or abilities may be selected as representative of all fatigues easily would be challenged as nonrepresentative of the others.

However, if "abilities" were seen as "ability," that is, the state of being able, the common denominator of all fatigues would be at hand. The disability of all fatigues first exhibits premature decrements of dexterity, then a premature strained effort and finally, shortened duration of action. "Diminished ability," therefore, means the diminished ability to maintain effort, i.e. diminished stamina.

Pared to this essential factor, a working definition of all chronic fatigues may read: "Pathological fatigue is a prolonged condition of diminished stamina manifested by various subjective symptoms and impaired abilities."

Idiopathic chronic fatigue is a pathological fatigue, i.e. a prolonged condition of diminished stamina, the cause of which is unknown. Within this diagnosis are those fatigues that at their onset may have been associated with medical, surgical, obstetrical, or traumatic condition but over time have taken a course of their own and thus have become idiopathic. The etiology of so-called psychological fatigue, whether said to be inner conflict or external stress, still is speculative so that, for the present, these fatigues also are idiopathic. And, it would not be surprising if some of the fatigues within psychiatric syndromes turned out to be idiopathic.

IDIOPATHIC CHRONIC FATIGUE ASSESSMENT

Once identified as the key to understanding pathological fatigues, stamina requires objective measurement. This measure is needed to: establish the existence of the problem; distinguish minor problems from the more severe; and set the stage for realistic management. Unfortunately, we have only approximate means of assessing fatigue.

A few patients given to strenous physical activity may well quantify their disability by comparing what they used to do with what they do now. A tennis player who routinely went three or four sets barely can last for two sets. A landscape gardener who could work 12 hours a day and six days a week feels at the edge of collapse after 3 hours.

But not many patients have specific activities that easily lend themselves to numbering hours or minutes of staying power. An office job of eight hours or the care of a home and children that may have been easily carried out now cause strain at some periods during the day. It is difficult to say how many periods each day and how long each period is.

For most people, these periods of tiredness blend into one another on any given day and throughout the week. Patients know, however, that they are not functioning with their usual effectiveness. They also become aware that they do not have the energy of everybody else. Such observations are much too subjective and general to enable a physician to take a measure of their fatigue.

To frustrate the assessment further, many people have misleading self-evaluations of fatigue. A person who says "I have been tired all my life" may consider a state of marked disability as normal, while a person who feels compelled to keep up with an extremely energetic close associate may feel his average stamina to be distressingly insufficient. Stoics deny fatigability; worrywarts exaggerate it.

Any attempt to get a measure of a patient's stamina must circumvent these obfuscations, while the subjective and partially objective generalities are made more specific and tangible. This can be done to a helpful degree by having the patient make close observation of the onset and passing of fatigue throughout a few typical days. Although this process by no means eliminates the subjective element, it does induce patient and physician to think about fatigue as objectively as possible. These observations permit fatigue to be graded on a six-level scale:

Level I. Periods of unusually vigorous activity are interspersed with immobilizing fatigue.

Level II. Tiredness persists for one-half to two hours after arising; return of tiredness mid- or late-afternoon for one to two hours; early evening fatigue.

Level III. Tiredness is noticeable most of the day.

Level IV. Ordinary tasks are a strained effort; energy is available for only important matters.

Level V. Every activity is a distressed, struggling effort.

Level VI. Exhausted; sofa-bound; and bedridden.

A few patients will find their fatigue patterns closely matching just one of the six levels. Each patient is unique in the routine of daily activities, in the demands put upon him, and in the appearance and fading of fatigue symptoms. Therefore, most fatigue patterns only approximate one of the six identified levels and may even be seen to shift between two levels.

Stamina impairment of patients at levels I and II obviously is so grossly different from that of patients at levels V and VI that concern about obtaining a quantitative measure hardly seems worthwhile. But levels II, III and IV, the most common fatigue levels presented to a physician, are difficult. It is at these levels of fatigability that an objective test is required to identify the impairment and its degree; the test would be called upon to measure a person's endurance powers for ordinary daily activities.

DISCUSSION

For clinicians long-pressed to treat its myriad forms, chronic fatigue's checkered career has been as dramatic as it has been bewildering. Late 19th-century publications colorfully scrambled physiologic concepts with nervous system and emotional/psychological constructs. Into the 1930s, medicine was treating chronic fatigue as a physiologic disorder with emotional overlays,[41] while psychiatry was treating the same disorder, then called neurasthenia, as a neurotic disorder with some physical manifestations. Although speculative unconscious conflicts and other conjectural mental factors were held to be causes of neurasthenia, physical rehabilitative measures were briefly added to psychiatry's chief treatment method, psychotherapy.

Any physical treatment measure that enhanced a patient's vitality was seen as "adjunct" to psychotherapy. When World War II combat exhaustion centers were ordered to use 40 to 50 units of insulin daily in treating large numbers of psychiatric combat casualties,[42] it was evident that the surgeon general and his psychiatric consultants saw physical measures fully as important as psychotherapy, if not more so, under war time stringencies.

Physical exhaustion lost its cachet after the war.[42,43] Combat exhaustion was to be given a civilian diagnosis. The symptoms of anxiety and depression, common features of combat exhaustion, dominated the syndromes and fatigue became secondary, even incidental.

During the past few decades, family physicians with improving diagnostic means have been able to identify with confidence those chronic fatigue patients who have no discernible disease. Since these patients are presumed to be physiologically sound, it would appear appropriate to refer them to psychiatry. Psychiatry, meanwhile, has assigned fatigue to discrete syndromes on which it focuses its attention: depression, dysthymia, anxiety, and somatoform disorder. The role that fatigue plays in these syndromes is quite different from that in medical illness. Where the fatigues of medicine are a direct result of the disease process, the fatigues of psychiatry may be a result of the disorder, an important contributory factor, or an irregularly appearing manifestation.

The fatigue of depression is especially puzzling. Retarded thoughts and heavy sluggish movements of depression feel like tiredness, although there may be no impairment of stamina. A long struggle against depression might result in reduced stamina, the fatigue unnoticeable in the context of depression. Or, disabling fatigue day after day may lead to a despondency barely distinguishable from depression. In dysthymic states, the despair over chronic fatigability is difficult to distinguish from depression. In some anxiety states, patients may be tired because they constantly are worried or may be anxious because their powers are failing them.

Psychiatry's wrestling with fatigue has come full circle—from neurasthenia, to psychophysiological nervous system reaction, to abandonment with a gesture to neurasthenia, to assignment to syndromes of depression, dysthymia, and anxiety, and back to neurasthenia with a new designation, undifferentiated somatoform disorder. Changing labels periodically has not furthered an understanding of chronic fatigue. If this common clinical complaint is to be understood and treated, it probably is best to call it by its own name, chronic fatigue, and consider it an entity by itself.

If we agree that a chronic fatigue state is theoretically possible, only a small first step will be taken. Then come problems of identification, measurement, etiology, pathophysiology, and treatment. Its relationship to other illnesses must also be studied.

If we could agree on the presence of a chronic fatigue state, it also could be a boon to an apprehensive patient. It could reassure against the tormenting prospects of an undiagnosed lethal disease, a mental breakdown or intolerable ridicule. We hope our working definition of idiopathic chronic fatigue and our method of assessment will enable physicians and patients to work together to determine etiology and evolve plans for management. ■

Submitted: June 1989; Accepted: September 1989

REFERENCES

1. Beard GM: Neurasthenia, or nervous exhaustion. *Bost Med Surg J* 3:217-220, 1869.
2. Beard GM: *American Nervousness, Its Causes and Consequences.* New York, NY, GP Putnam, 1881.
3. Beard GM: *A Practical Treatise on Nervous Exhaustion (Neurasthenia).* New York, NY, William Ward, 1880.
4. Beard GM: *A Practical Treatise on Nervous Exhaustion (Neurasthenia), Edition 5.* New York, NY, EB Treat & Co., 1905.
5. Mitchell SW: *Fat and Blood: An Essay on the Treatment of Certain Forms of Neurasthenia and Hysteria, Edition 3.* Philadelphia, PA, JB Lippincott, 1884.
6. daCosta JM: On irritable heart: A clinical study of a form of functional cardiac disorder and its consequences. *Am J Med Sci* 61:17-52, 1871.
7. Burr CW: Neurasthenia, in Osler W, *Modern Medicine.* Philadelphia, PA, Lea & Febiger, 1910, pp. 721-738.
8. Chatel JC, Peel R: A centennial review of neurasthenia. *Am J Psychiatry* 126:48-55, 1970.
9. Laughlin HP: *The Neuroses.* Washington, DC, Butterworths, 1967.
10. *Diagnostic and Statistical Manual of Mental Disroders, Edition 1.* Washington, DC, American Psychiatric Association, 1952.
11. *Diagnostic and Statistical Manual of Mental Disorders, Edition 2.* Washington, DC, American Psychiatric Association, 1963.
12. *Diagnostic and Statistical Manual of Mental Disorders, Edition 3.* Washington, DC, American Psychiatric Association, 1980.
13. Wyngaarden JB, Smith LH: *Cecil Textbook of Medicine.* Philadelphia, PA, WB Saunders Co., Harcourt Brace Jovanovich, 1988.
14. Braunwald E, Esselbacher KJ, Petersdorf RG, et al.: *Harrison's Principles of Internal Medicine, 11th Edition.* New York, NY, McGraw Hill Book Co., 1987.
15. Rakel RE: *Conn's Current Therapy.* Philadelphia, PA, WB Saunders Co., Harcourt Brace Jovanovich, 1988.
16. Shands HC, Finesinger JE: Note on the significance of fatigue. *Psychosom Med* 14:309-314, 1952.
17. Friendlander HS: Fatigue as a presenting symptom. *Curr Ther Res* 4:441-449, 1962.
18. Ellis FR, Cox M: Fatigue—a clinico-pathological survey. *Practitioner* 191:760-762, 1963.
19. Berger DM: Return of neurasthenia. *Comp Psychia* 14:557-562, 1973.
20. Michael SR: Normal and not-so-normal fatigue. *Consult* 14:42-43, 1974.
21. Rockwell DA, Burr BD: The tired patient. *J Fam Pract* 5:853-857, 1977.
22. Swanson DW, Moore GL, Nobrega FT: Family history of alcoholism in patients with chronic fatigue. *J Clin Psychiatry* 39:754-755, 1978.
23. McCranie EJ: Neurasthenic neurosis: Psychogenic weakness and fatigue. *Psychosom* 21:19-24, 1980.
24. Kaye PL: Fatigue-pervasive problem. *NY State J Med* 80:1225-1229, 1980.
25. Pateliakhoff A: Adrenocortical activity and some clinical findings in acute and chronic fatigue. *J Psychosom Res* 25:91-95, 1981.
26. Jerrett WA: Lethargy in general practice. *Practitioner* 225:731-737, 1981.
27. Montgomery GK: Uncommon tiredness among college undergraduates. *J Consult Clin Psychol* 51:517-525, 1983.
28. Morris JD: Fatigue as a presenting complaint in family practice. *J Fam Pract* 10:795-801, 1980.
29. Solberg LI: Lassitude—a primary care evaluation. *JAMA* 251:3272-3276, 1984.
30. Sugarman JR, Berg AD: Evaluation of fatigue in a family practice. *J Fam Pract* 19:643-647, 1984.
31. Lassitude. *Br Med J* 290:1161-1162, 1985.
32. Valdini AF: Fatigue of unknown etiology—a review. *Fam Pract* 2:48-53, 1985.
33. Hart FD: Fatigue, in Hart FD, *French's Index of Differential Diagnosis.* Bristol, England, Wright, 1985.
34. Halberstam MJ: Fatigue, in Conn RB, *Current Diagnosis, Edition 7.* Philadelphia, PA, WB Saunders Co., 1985.
35. Strauss SE, Tosato G, Armstrong G, et al.: Persisting illness and fatigue in adults with evidence of Epstein-Barr virus infection. *Ann Intern Med* 102:7-16, 1985.
36. Holmes GP, Kaplan JE, Steward JA, et al.: A cluster of patients with mononucleosis-like syndrome: Is Epstein-Barr virus the cause? *JAMA* 257:2297-2302, 1987.
37. Beschwald D, Sullivan JL, Komaroff AL, et al.: Frequency of chronic active Epstein-Barr virus infection in a general medical practice. *JAMA* 257:2303-2307, 1987.
38. Strause SC: EB or not EB—that is the question (editorial). *JAMA* 257:2335-2336, 1987.
39. Edwards H, Rose EA, Schorow M, Kemp TC: Postoperative deterioration in psychomotor function. *JAMA* 245:1342-1343, 1981.
40. *Diagnostic and Statistical Manual of Mental Disorders, Edition 3. Revised.* Washington, DC, American Psychiatric Association, 1987, pp. 266-267.
41. Macy JW, Allen EV: A justification of the diagnosis of chronic nervous exhaustion. *Arch Intern Med* 7:861-867, 1933-1934.
42. Bartemeier LH, Kubie LS, Menninger KA, et al.: Combat exhaustion. *J Nerv Ment Dis* 104:358-389, 1946.
43. Kardiner A, Spiegel H: *War Stress and Neurotic Illness.* New York, NY, London, Paul B. Hoeber, 1947.

Report of the Nominating Committee

Offices To Be Filled By Election: 1990 Annual Meeting

Office	Term	Nominee and County
Officer		
President-Elect	1 year	Joseph A. Riggs, MD, Camden
1st Vice-President	1 year	William E. Ryan, MD, Mercer
2nd Vice-President	1 year	Joseph N. Micale, MD, Hudson
Trustees		
1st District	3 years	Anthony P. Caggiano, Jr, MD, Essex
	3 years	R. Gregory Sachs, MD, Union
2nd District	3 years	Philip J. Jasper, MD, Passaic
	3 years	Carl Restivo, Jr, MD, Hudson
3rd District	3 years	Michael M. Heeg, MD, Mercer
	3 years	Leticia V. DeCastro, MD, Middlesex
4th District	3 years	Angelo S. Agro, MD, Camden
Judicial Councilors		
1st District	3 years	Anita Falla, MD, Essex
4th District	3 years	George T. Hare, MD, Camden
AMA Delegates		
	2 years	Karl T. Franzoni, MD, Mercer
	2 years	Frederick W. Durham, MD, Camden
	2 years	Ralph J. Fioretti, MD, Bergen
	2 years	Palma E. Formica, MD, Middlesex
	2 years	John S. Madara, MD, Salem
	2 years	Henry J. Mineur, MD, Union
	2 years	Edward A. Schauer, MD, Monmouth
AMA Alternate Delegates		
	1 year*	A. Ralph Kristeller, MD, Union
	2 years 2 years 2 years 2 years 2 years 2 years	The Nominating Committee finds there are seven excellent candidates available for the six alternate delegate positions. The candidates are: Doctors Joel S. Cherashore, *Paul J. Hirsch*, A. Ralph Kristeller, *Joseph N. Micale, Irving P. Ratner, Carl Restivo, Jr*, and R. Gregory Sachs. (Italics denotes incumbents.) The House will decide which of these well-qualified members shall serve.
Administrative Councils		
Legislation		
1st District	2 years	George J. Hill, MD, Essex
2nd District	2 years	No nominee named by the Nominating Committee
3rd District	2 years	Gabriel F. Sciallis, MD, Mercer
4th District	2 years	William V. Harrer, MD, Camden
Medical Services		
1st District	2 years	Robert H. Stackpole, MD, Union
2nd District	2 years	Frederic E. Wien, MD, Passaic
3rd District	2 years	Ismail Kazem, MD, Mercer
4th District	2 years	Joseph W. Sokolowski, Jr, MD, Camden

REPORT OF THE NOMINATING COMMITTEE

Office	Term	Nominee and County
Mental Health		
1st District	2 years	Rita R. Newman, MD, Essex
2nd District	2 years	No nominee named by the Nominating Committee
4th District	2 years	Kenneth J. Rubin, MD, Monmouth
5th District	2 years	Terry A. Johnston, MD, Atlantic
Public Health		
1st District	2 years	Richard R. Lorber, MD, Union
2nd District	2 years	No nominee named by the Nominating Committee
3rd District	2 years	Lawrence D. Frenkel, MD, Middlesex
4th District	2 years	Mary F. Campagnolo, MD, Burlington
Public Relations		
1st District	2 years	Philip A. Rispoli, MD, Essex
3rd District	2 years	Leticia V. DeCastro, MD, Middlesex
4th District	2 years	Blackwell Sawyer, Jr, MD, Ocean
6th Member	2 years	Harry H. Brunt, Jr, MD, Monmouth
Standing Committees		
Annual Meeting	2 years	John P. Mudry, MD, Bergen
	2 years	Frank R. Romano, Sr, MD, Union
Finance and Budget	2 years	Julie M. Fortunato, MD, Bergen
	2 years	No nominee named by the Nominating Committee
Medical Education	2 years	Paul C. Royce, MD, Monmouth
	2 years	Anthony P. DeSpirito, MD, Monmouth
Membership Services	2 years	Donald J. Cinotti, MD, Hudson
	2 years	Robert L. Maggs, MD, Monmouth
Publication	2 years	William V. Harrer, MD, Camden
	2 years	Morris Soled, MD, Hudson

*Vacancy created by resignation of Bernard Robins, MD.

NOTEBOOK

TRUSTEES' REPORT

A regular meeting of the Board of Trustees was held on Sunday, February 18, 1990, at the executive offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society; a summary of significant actions follows:

Report of the President . . .

(1) Professional Liability Insurance . . . Brought attention to Dr. Hirsch's column in the March issue of *NEW JERSEY MEDICINE,* and noted the new members of the Board of Directors of the Underwriters: Drs. Carnes, Hirsch, Palace, Riggs, and Robinson.

(2) Awards . . . Congratulated Dr. Fioretti as the recipient of the Doctor of the Year Award from the New Jersey Academy of Family Practice; Dr. Fares as the recipient of a humanitarian award from the American Cancer Society; and Dr. Maurer as the recipient of the Doctor of the Year Award from the New Jersey Osteopathic Society.

(3) Tort Reform . . . Noted Dr. Maurer's efforts on behalf of tort reform.

(4) AIDS . . . Heard much discussion on the topic of AIDS, and noted that the Academy of Medicine of New Jersey is sponsoring a seminar on AIDS at the MSNJ Annual Meeting, and noted three major symposiums, "Identification and Management of Asymptomatic HIV-Infected Persons in New Jersey," would be sponsored by the Academy, MSNJ, and NJDOH.

(5) Medicare Reimbursement on Unassigned Claims . . . Noted that a letter was sent to New Jersey congressmen objecting to the new Medicare requirement that physicians file claim forms for patients, and a memo was sent to the AMA delegation requesting an appropriate resolution be developed regarding the requirement.

(6) AMA Council on Scientific Affairs . . . Received and referred to the AMA delegation a request for endorsement of Dr. W. Douglas Skelton, as a candidate for a position on the AMA Council on Scientific Affairs.

Report of Executive Director . . .

(1) Financial Statements . . . Reviewed and approved the financial statements for the period ending December 31, 1989.

(2) Legislation . . . Received comments on the following: Fair Automobile Insurance Reform Act of 1990 (A-1; S-2295), and noted that MSNJ needs to take a responsible position regarding the issue of balance billing; physician-directed physical modalities (A-546) and noted MSNJ will assume a position of disapproved on the basis that the State Board of Medical Examiners already has adopted a ruling on physical modalities; and Medicare mandatory assignment (A-3042) and noted this bill almost mirrors MSNJ's senior courtesy program.

(3) Litigation . . . Reviewed the following: PRO versus MSNJ and that William Cahill, Esquire, is the attorney and discussions regarding possible settlement are continuing with a June trial date anticipated; MSNJ versus State Board of Physical Therapy case was heard in the state Supreme Court in February; MSNJ versus Merin and St. Paul Insurance Company has billed for the surcharge; State Board of Medical Examiners versus Sinha and MSNJ has entered the case amicus; Clinical Laboratory Improvement Act and noted the Department of Health is reviewing New Jersey licensing requirements for clinical laboratories; medical waste registration fee refunds will likely not be made before July 2, 1990; membership demographics noted that 68.5 percent of MSNJ's dues-paying membership is 55 years of age or younger; construction of Underwriters' Offices is being completed and the balance of funds will be held in reserve until all work is completed.

Monthly Reports . . . Received reports from UMDNJ, the New Jersey Hospital Association, and the Academy of Medicine of New Jersey.

Council on Public Health . . . Approved the following recommendation and also voted to expand the recommendation to include flu vaccination for children with chronic lung diseases and other debilitating diseases:

> That the Society petition the Governor, and Commissioners of Health and Education, and the State Legislature to intensify efforts to vaccinate unimmunized children and to require a second MMR vaccination for school attendance; and that the Society request that appropriate funds be made available for those who are unable to pay for the immunization.

Also, approved the following recommendation:

That the Medical Society of New Jersey request the Department of Environmental Protection to provide educational programs for physicians, through the Academy of Medicine of New Jersey, pertaining to medical waste disposal.

Task Force on AIDS . . . Discussed the following recommendation and asked Mr. Maressa to contact the chairman of the Task Force on AIDS to discuss the concerns:

That the Board of Trustees confer with the Attorney General regarding clarification of the physician's responsibility and possible liability as outlined in the law.

Committee on Physicians' Health . . . Directed that concerns about the AMA and its impaired physicians program be expressed in a communication to the AMA and to Dr. Karl Franzoni for continued monitoring in his capacity as chairman of the New Jersey delegation and chairman of the AMA Reference Committee "F."

New Business . . .
(1) Medicare Reimbursement on Unassigned Claims . . . Directed the AMA Delegation to develop an appropriate resolution for introduction at the AMA Annual Meeting expressing objection to the new requirement (that physicians complete and mail the reimbursement form to Pennsylvania Blue Shield and notify the patient that the physician has complied with the requirement).
(2) Hospital Medical Staff Section (HMSS) . . . Noted the following items: caucus expenses; nominating committee report with the following for consideration: chairman, George T. Hare, MD, vice-chairman, Angelo S. Agro, MD, secretary, Carlo Porcaro, MD, member-at-large, J. Jerome Cohen, MD, and alternate delegate, Robert L. Wegryn, MD; selection of George T. Hare, MD, as HMSS representative to the MSNJ Board of Trustees; copies of model medical staff bylaws availability and requested William P. Isele, Esquire, to prepare model bylaws for New Jersey; and applicability of assured option law to eligible tissue donors and request of state attorney general to review concerns.

Correspondence . . . Noted the following: letter from Leah Z. Ziskin, MD, acting commissioner of health stating the Department is reviewing the Society's recommendations from our Task Force on the Shortage of Nurses and Technical Personnel and a letter from the president of the Hudson County Medical Society to the president of the State Board of Medical Examiners requesting that physician assistants not be permitted to practice in the state. ☐

UMDNJ NOTES

The annual University Day program of the University of Medicine and Dentistry of New Jersey (UMDNJ) was a great success this year, setting the right tone for the new year and, indeed, the new decade. This year's program was highlighted by the awarding of UMDNJ's University Medal for Distinguished Leadership to Governor Jim Florio (represented by New Jersey Secretary of State Joan Haberle); the presentation of excellence awards to UMDNJ employees; and my State of the University address.

UMDNJ's seven-year $520 million statewide capital development plan—the Facilities Master Plan—was the focus of the address. The plan, which spans 1990 through 1997, encompasses new and expanded health care, education, and research facilities at UMDNJ's campuses in northern, central, and southern New Jersey.

Highlights of the Facilities Master Plan include:

- **Camden/Stratford.** Southern New Jersey projects totalling approximately $65 million include:

Camden—Renovation of the Education and Research Building for the UMDNJ-Robert Wood Johnson Medical School to consolidate faculty offices and give faculty better access to research space; and acquisition of a building to replace the existing Emer-

ARE YOU MOVING?

If so, please send a change of address to *NEW JERSEY MEDICINE,* Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648, at least six weeks before you move.

Name ______________________________

Old Address ______________________________

City ______________ State ________ Zip ________

New Address ______________________________

City ______________ State ________ Zip ________

gency Medical Services facility.

Stratford—Continued development of the campus of the UMDNJ-School of Osteopathic Medicine, including an Academic Center; an addition to the Education and Research Building (already under construction); and UMDNJ-Community Mental Health Center; student housing; and renovation of the Kennedy Professional Center for administrative offices and research laboratories.

- **Piscataway/New Brunswick.** Central New Jersey projects totalling approximately $165 million include:

Piscataway—A research tower for the UMDNJ-Robert Wood Johnson Medical School; a facility (under construction) for the Environmental and Occupational Health Sciences Institute (operated jointly by UMDNJ and Rutgers University); student housing; an administration building for UMDNJ-Robert Wood Johnson Medical School; expansion of the UMDNJ-Community Mental Health Center to provide emergency and other support services; a professional building to house staff and services of the UMDNJ-Community Mental Health Center, now located in nearby Dunellen; and a children's residential treatment unit at the UMDNJ-Community Mental Health Center.

New Brunswick—A medical office building and parking deck for UMDNJ-Robert Wood Johnson Medical School.

- **Newark.** Newark campus projects totalling approximately $290 million include: renovation of the 65 Bergen Street building (formerly Martland Medical Center) to house the UMDNJ-School of Health-Related Professions and University administrative functions; a facility for the joint New Jersey Cancer Center/Center for Molecular Medicine and Immunology; expansion of the Medical Science Building to provide more research laboratories, classrooms, and faculty offices for UMDNJ-New Jersey Medical School and UMDNJ-New Jersey Dental School; a "helideck" for UMDNJ-University Hospital's trauma helicopter, part of the state's Jemstar air-rescue emergency medical service; expansion and renovation of the UMDNJ-Smith Library; an off-campus Family Health Care Center of UMDNJ-University Hospital; and an outpatient facility for the UMDNJ-Community Mental Health Center.

Financing for the Facilities Master Plan will come from a variety of sources, including UMDNJ's capital and operating budgets; the state's Jobs, Education & Competitiveness Bond Act of 1988; the sale of University bonds; and fundraising. Completion of projects will depend upon UMDNJ's ability to continue to attract federal and private grants and to maximize revenues from its health care services.

The University has identified $30 million in support for the plan, leaving about $490 million to be funded. Of that amount, about $74 million is not included in the University's seven-year plan, based on current financial projections; several projects will be funded in the succeeding seven years.

In the past fiscal year, UMDNJ's external funding support, which includes all grant and contract awards, reached $61.7 million, an 18.1 percent increase over the previous year. An average annual increase of 20 percent will bring UMDNJ's outside funding to $200 million by 1996, a level commensurate with the top-ranking health-sciences schools in the nation. ☐ Stanley S. Bergen, Jr, MD

MSNJ AUXILIARY

Health programs, workshops, cultural events, and charity fundraisers dominated recent county calendars. Camden County sponsored an "Adolescent Health Education Day" at Haddonfield Memorial High School and students from the various county high schools were invited to the all-morning session. Twenty-nine health professionals spoke on topics ranging from the physical to the emotional aspects of good health. This is the second consecutive year that Camden County has presented the successful program.

In Gloucester County, auxiliary members developed a program focusing on the health needs of senior citizens. An excellent film, "Wellness After Sixty," was purchased and auxiliary members who are geriatric and mental health nurses wrote instructional/discussion guides to accompany the film. The complete package will serve as a continuing education program for the county's numerous senior citizen groups and nursing homes.

Passaic County designed a GEMS Program (Good Emergency Mothers Program) originally formulated by the AMA Auxiliary. They now are in the process of finding people who can speak Spanish, Turkish, Arabic, or Asian, to talk to different groups of babysitters and parents.

Salem County earned a certificate from the American Cancer Society for participating in the Great American Smokeout; auxiliary members made small packets of sugarless candies to help the smokers trying to quit and distributed educational materials about smoking to physicians' offices.

Many counties also held workshops and programs for the benefit of their members. "Medical Concerns After 25 Years" was the topic of a lecture presented by a gynecologist in Atlantic County. In Camden County, a certified public accountant spoke on "Financial Planning," and in Mercer County, an attorney/assemblywoman spoke on "Women in Law and Politics." Gloucester County presented a program on "Landscaping with Perennials."

Thousands of dollars for nursing scholarships and other auxiliary charities also were realized. Camden County raised over $5,000 on their "Annual Theatre Trip to New York." Gloucester County netted $2,200 on an "Art Show and Auction." Burlington County hosted a prosperous "Progressive Dinner" and Mercer County held a benefit at the Off-Broad Street Theatre. Passaic's breakfast fundraiser and art tour through the Brooklyn Museum and Botanical Gardens sparked great interest while Salem County's well-attended "Mistletoe Ball" enhanced the county's Gertrud Jonas Nursing Scholarship Fund.

In addition, Mercer County collected food and raised $1,100 for the Physicians' Health Program. The Union County Auxiliary came to the aid of organizations and churches that needed food and clothing for the homeless. They also collected canned goods and household items for the Battered Women's Shelter.

Finally, almost every county auxiliary in the state held functions to earn money for the American Medical Association Education and Research Foundation (AMA-ERF). Holiday sharing cards, boutiques, bazaars, raffles, and luncheons brought in thousands of dollars for the Auxiliary's most significant nationwide charity.

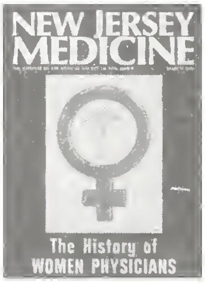
Praising the New Jersey Auxiliary's philanthropic endeavors and volunteer efforts, Lonnie R. Bristow, MD, AMA-ERF president, reminded auxiliary members at the September 1989 Confluence in Chicago, "When you become involved you clearly enhance the image of the medical profession in every possible way. Every time you get your name before the public, some of the luster rubs off on the AMA. We love you for it, and we thank you for it." ☐ Marion H. Geib

AMNJ REPORT

The Academy of Medicine of New Jersey, the Medical Society of New Jersey, and the New Jersey State Department of Health, Division of AIDS Prevention and Control will present three major symposia on "Identification and Management of Asymptomatic HIV-Infected Persons in New Jersey," to be held in May at the following locations: Tuesday, May 1, 1990—8:30 A.M., Sheraton Newark Airport; Wednesday, May 2, 1990—8:30 A.M., Cherry Hill Inn; and Wednesday, May 9, 1990—8:30 A.M., Sands Hotel & Casino, Atlantic City. Richard Dixon, MD, program chairperson, has announced that Henry Mazur, MD, chief of critical care medicine at the National Institutes of Health, will be the keynote speaker for the May 1 and 2 events. Additional participants are Drs. James Oleske, John Sensakovic, and Alan Lin-Greenberg.

On Saturday, March 31, 1990, the Academy of Medicine sponsored a major symposium, "Noninvasive Vascular Imaging in the 1990s," at the Ramada Renaissance Hotel, East Brunswick. The New Jersey Institute of Ultrasound in Medicine and the Vascular Society of New Jersey cosponsored the event. Participants were shown how to identify normal and abnormal patterns of vascular disease by noninvasive techniques. Illustrative examples were presented by the faculty on slide and video formats. Emphasis was on color doppler applications and high-resolution real-time ultrasonography. The final segment of the symposium offered a preview of the next generation of noninvasive vascular imaging with magnetic resonance angiography. Dr. M. Stanley Kron was program chairman.

On April 1, 1990, the Academy added the American College of Cardiology (ACC), NJ Chapter to



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our list of societies. ACC is a prestigious, national specialty society that has decided to develop a chapter component. The first president is Dr. John Gregory, and ACC anticipates a membership of over 700 in its first year of operation.

The New Jersey Physicians Golf Association Executive Committee met, and tournament dates and locations are being scheduled for the 1990 season. Further information will be disseminated in the near future; however, we are pleased to announce that Metedeconk National in Jackson will be one of the sites. Membership information is available by contacting Lisa Swartek at the Academy's Executive Offices. ☐ Frederick B. Cohen, MD, President

PLACEMENT FILE

The following physicians have written to the Executive Offices of MSNJ seeking information on opportunities for practice in New Jersey. The information listed below has been supplied by the physicians. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

GASTROENTEROLOGY

Eric Avezzano, MD, 2510 B.S. Walter Reed Dr., Arlington, VA 22206. SUNY-Stony Brook 1985. Board certified (IM); board eligible (GI). Group, partnership, solo. Available July 1990.

GENERAL PRACTICE

Leonid Belopolsky, MD, 955 Chanticleer Dr., Cherry Hill, NJ 08003. Moscow 1961. Board certified (ANES). Also, internal medicine. Available.

Randi Silverbrook, DO, 3024 Wistar Ct., Bensalem, PA 19020. College of Osteopathic Medicine 1985. Partnership or group. July 1990.

INTERNAL MEDICINE

Leonid Belopolsky, MD, 955 Chanticleer Dr., Cherry Hill, NJ 08003. Moscow 1961. Board certified (ANES). Also, general practice. Available.

David D. Gross, MD, 1045 Liberty St., Apt. 1, Trenton, NJ 08611. St. George's University (Grenada) 1987. Board eligible. Available August 1990.

Suresh Reddy, MD, 3301 Cobblestone Circ., #6, Waterloo, IA 50703. Kakatiya (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

NUCLEAR MEDICINE

Robert W. Cifers, MD, 26 Somers Ave., Seaville, NJ 08230. Ohio State 1983. Board eligible. Available.

PATHOLOGY

Judith Vople, MD, 106 Orlando Blvd., Toms River, NJ 08757. UMDNJ 1985. Board eligible. Group or hospital-based. Available July 1990.

PHYSICAL MEDICINE

Robert B. Thorne, MD, 112 Woodside Ave., Trenton, NJ 08618. Rutgers 1980. Board certified. Part time or full time. Available.

1990 ANNUAL MEETING

Saturday, May 5, 1990

3:30 p.m.	Board of Trustees' Meeting
7:00 p.m.	Officers' Cocktail Reception and Dinner

Sunday, May 6, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
10:00 a.m.	Educational Programs
11:00 a.m.	Exhibits Open
1:00 p.m.	House of Delegates
3:30 p.m.	Reference Committee Meetings

Monday, May 7, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates (Election)
12:00 noon	Golden Merit Award Ceremony and Reception
1:00 p.m.	Professional Liability Program (MIIENJ)
2:45 p.m.	Reference Committee Meetings
5:00 p.m.	JEMPAC Political Forum
5:45 p.m.	JEMPAC Wine and Cheese Reception

Tuesday, May 8, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates
1:30 p.m.	House of Delegates
2:00 p.m.	Exhibits Close
6:30 p.m.	Inaugural Reception and Dinner

Wednesday, May 9, 1990

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	General Session
1:00 p.m.	Board of Trustees' Meeting

THE YOUNG PHYSICIANS COMMITTEE
of the
MEDICAL SOCIETY OF NEW JERSEY
and
THE YOUNG LAWYERS DIVISION
of the
NEW JERSEY STATE BAR ASSOCIATION

PRESENT

THE FIRST ANNUAL HOMELESS AWARENESS CONFERENCE

The objective of this program is to heighten public awareness of the homelessness crisis and to train professionals, educators, lawyers, physicians and social service providers, in the areas of care required by homeless individuals so that these professionals may more effectively provide services for the homeless in their area especially on a professional and pro bono basis.

DATE:	**Friday, May 11, 1990**	
LOCATION:	New Jersey Law Center One Constitution Square New Brunswick, NJ 08901-1500	
TIME:	9:00-9:30	Registration
	9:30-10:15	Opening session
	10:30-12:00	Workshops
	12:15-1:30	Lunch
	2:00-3:30	Workshops
	3:45-4:45	Open Legislative Forum
COST:	$20.00	

For additional information contact
Ron Rouse at MSNJ (609) 896-1766

Elizabeth General Medical Center Foundation
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IRVING R. FOX MEMORIAL LECTURE ON PEDIATRIC AMBULATORY CARE

Guest Speaker
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SUNDAY, APRIL 29, 1990
10:30 A.M.

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A buffet brunch will be served prior to the presentation.

No admission charge. Limited seating is available ONLY by calling 201-558-8479

AIDSline ☎

The Academy of Medicine of NJ,
The Medical Society of NJ &

The New Jersey State Department of Health
Division of AIDS Prevention & Control
present

Identification and Management of Asymptomatic HIV-Infected Persons in New Jersey

Tuesday, May 1, 1990, 8:30 A.M. - 1:45 P.M. at the Sheraton Newark Airport in Elizabeth

or

Wednesday, May, 2, 1990, 8:30 A.M. - 1:45 P.M. at the Cherry Hill Inn in Cherry Hill

or

Wednesday, May 9*, 1990, 8:30 - 11:30 A.M. the Medical Society of New Jersey's Annual Meeting at the Sands Hotel & Casino in Atlantic City

Participants will be able to develop an effective case-management plan for early HIV infection that can be implemented in their offices or clinics and will learn about new treatment approaches under study.

Richard E. Dixon, MD, Course Chairman

Lunch is included on May 1st and 2nd. Fee $15.
* No preregistration or fee required.

Call AMNJ, 609-896-0486 for further information.

JUNE 16

10th ANNUAL ADVANCES IN GASTROENTEROLOGY

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The 6th Annual International Symposium on Acupuncture & Electro-Therapeutics will be held at Columbia University, School of International Affairs, 420 W. 118th St., N.Y. City, during October 25-28, 1990.

These meetings are co-sponsored by the International College of Acupuncture & Electro-Therapeutics & its official journal, Acupuncture & Electro-Therapeutics Research, The International Journal (published by Pergamon Press & indexed in 15 major indexing periodicals, including Index Medicus), Heart Disease Res. Foundn, N Y Pain Center of Long Island College Hospital (a teaching hospital of SUNY-Health Science Center at Brooklyn); Electrical Engineering Dept., Manhattan College; Nordic Medical Acupuncture Society (Scandinavia); Schmerz Therapeutische Kolloquium (West Germany); Japan Bi-Digital O-Ring Test Assn; etc. The meetings are also eligible for AMA CME Cat. 1 credit (about 40 credit-hours for the Symposium).

For information on meetings or submission or presentation of papers, contact Symposium Chairman Y. Omura, M.D., Sc.D., 800 Riverside Drive (8-I) New York, NY 10032 Tel: (212) 781-6262 (10am to 10pm 7 days a week) or (212) 928-0658, Dr. Shinnick (212) 727-9674, or Bro. Michael Losco (212) 920-0162.

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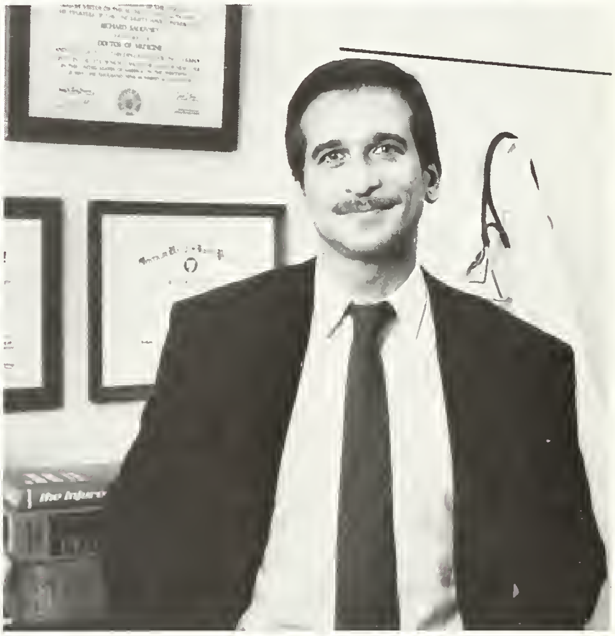
AMPC



Being a doctor simply wasn't enough for Richard Sadovsky. He also wanted to be a teacher, an administrator, and a leader.

"Medical school prepared me to be a doctor", he says. "It didn't prepare me to be a teacher and administrator. To expand my vision of the health services profession, to understand how the health system is organized and financed, and, finally, to participate in the process, I needed to develop strong management skills.

"I also needed to strengthen my knowledge of marketing, financial analysis, quality assurance, strategic planning, and management information systems."

Dr. Sadovsky is now the activist he wants to be. Only recently, for example, he helped set up an advisory council on the care of the older adult.

"I now have the skills to work inside the system and to change and improve it."

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CONTINUING EDUCATION

ALLERGY

May

7- **Immunology and the Visual**
8 **System**
8 A.M.-5 P.M.—Bally's Grand Hotel, Atlantic City
(UMDNJ)

ANESTHESIOLOGY

May

15 **Meeting**
6-9 P.M.—Ramada Inn, Clark
(New Jersey State Society of Anesthesiologists)

DERMATOLOGY

May

16 **Robert Wood Johnson Medical School Dermatological Conferences**
6-9 P.M.—Rutgers Community Health Plan, US #1, New Brunswick
(UMDNJ)

24 **Update on Superficial Fungal Infections**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

INFECTIOUS DISEASE

May

1 **Identification and Management of Asymptomatic HIV-Infected Persons in New Jersey**
8:30 A.M.-1:45 P.M.—Sheraton Newark Airport, Elizabeth
(AMNJ, MSNJ, and NJDOH)

2 **Identification and Management of Asymptomatic HIV-Infected Persons in New Jersey**
8:30 A.M.-1:45 P.M.—Cherry Hill Inn, Cherry Hill
(AMNJ, MSNJ, and NJDOH)

2 **Lyme Disease**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ and NJDOH)

9 **Proper Use of Antibiotics**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ and NJDOH)

9 **Identification and Management of Asymptomatic HIV-Infected Persons in New Jersey**
8:30-11:30 A.M.—Sands Hotel & Casino, Atlantic City
(AMNJ, MSNJ, and NJDOH)

22 **Clinical Management of HIV Infection**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ and NJDOH)

30 **Lyme Disease**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ and NJDOH)

MEDICINE

May

1 **Aspiration Syndrome in the Mentally Retarded**
1-2 P.M.—Woodbridge Developmental Center, Woodbridge
(AMNJ)

1 **Fourth Annual Internal**
8 **Medicine Update and**
15 **Board Review**
22 5:30-7:30 P.M.—Cooper Hospital,
29 Camden
(Cooper Hospital/UMDNJ)

2 **Medical Lecture Series**
9 10:30-11:30 A.M.—Christ
16 Hospital, Jersey City
23 *(Christ Hospital)*

2 **Internal Medicine Review**
9 **Course**
16 4-7 P.M.—University Hospital,
23 New Brunswick
(AMNJ and UMDNJ)

3 **Computers in Medicine**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

3 **Liver Transplantation**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center)

4- **Combined Annual Meeting**
5 Cherry Hill Inn, Cherry Hill
(New Jersey Society of Pathologists and PA Association of Clinical Pathologists)

4 **Continuing Medical**
11 **Education Program**
18 12 Noon-1 P.M.—South Jersey
25 Hospital System, Bridgeton
(South Jersey Hospital System)

6- **MSNJ Annual Meeting**
9 Sands Hotel Casino and County Club, Atlantic City
(MSNJ)

8 **Renal Biopsy Conference**
12:30-2 P.M.—Barnert Memorial Hospital Center, Paterson
(Barnert Memorial Hospital Center)

9 **Medical Malpractice: Criminal Law and Tort Issues**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ)

10 **Diabetes-Related Kidney Disease**
1:30-2:30 P.M.—Vineland Developmental Center, Vineland
(AMNJ and NJDOH)

10 **Update on Geriatric Medicine**
24 4:30-6:30 P.M.—Cooper Hospital,
Camden
(Cooper Hospital/UMDNJ)

11 **New Laboratory Diagnostic Tests**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

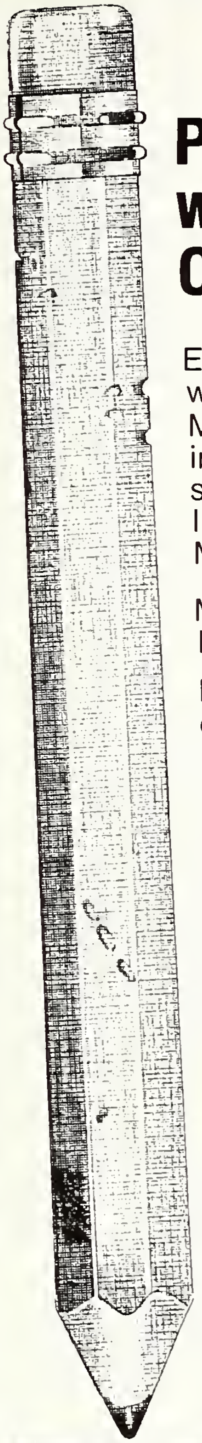
14 **Retinopathy**
1-2 P.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ)

15 **Volume Homeostatis in Pregnancy**
6:30-9:30 P.M.—Overlook Hospital, Summit
(AMNJ)

16 **Nutritional Assessment**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

16 **Dilemmas of Dying**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ)

17 **Continuing Medical Education**
12 Noon-1 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center)



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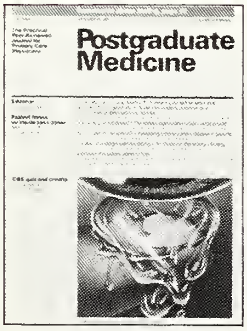

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NJM4/90

18 **Retinopathy**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(AMNJ)

18 **Rheumatoid Arthritis: Etiology and Pathogenesis**
12:15-1:15 P.M.—Kennedy Memorial Hospital, Stratford
(UMDNJ and Kennedy Memorial Hospital)

19 **Morbidity and Mortality**
26 **Conference**
8:30-10 A.M.—New Jersey Medical School, Newark
(UMDNJ)

23 **Functional Assessment of the Elderly**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ)

24 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas Medical Center, Livingston
(Saint Barnabas Medical Center)

June

1 **Prevention of Lower Extremity Amputations**
9-10 A.M.—St. Francis Medical Center, Trenton
(AMNJ and NJDOH)

1 **Continuing Medical**
8 **Education Program**
15 12 Noon-1 P.M.—South Jersey
22 Hospital System, Bridgeton
29 *(South Jersey Hospital System)*

4- **11th Annual Comprehensive**
22 **Course in Occupational Health**
8:30 A.M.-5 P.M.—Robert Wood Johnson Medical School, Piscataway
(UMDNJ)

5- **Annual Meetings**
6 Trump Plaza Hotel and Casino, Atlantic City
(NJ Gastroenterological Society and NJ Society for Gastroenterological Endoscopy)

5 **Fourth Annual Internal**
12 **Medicine Board Review**
19 5:30-7:30 P.M.—Cooper Hospital,
26 Camden
(Cooper Hospital/UMDNJ)

6 **Adrenal Disease**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

6 **Medical Lecture Series**
13 10:30-11:30 A.M.—Christ Hospital, Jersey City
(Christ Hospital)

7 **Erythropoietin**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center)

12 **Renal Biopsy Conference**
12:30-2 P.M.—Barnert Memorial Hospital Center, Paterson
(Barnert Memorial Hospital Center)

13 **Chronic Pain Management and Issues Related to Iatrogenic Addiction**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

13 **Parkinson's Disease**
8:30 A.M.-5 P.M.—Robert Wood Johnson Medical School, Piscataway
(UMDNJ)

13 **Parkinsonism**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ)

14 **Aspiration Syndrome in the Mentally Retarded**
1-2 P.M.—Woodbridge Developmental Center, Woodbridge
(AMNJ)

15 **Diabetes in Pregnancy**
9-10 A.M.—St. Francis Medical Center, Trenton
(AMNJ and NJDOH)

20 **Medical Aspects of Nutrition—Anorexia and Weight Loss**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

21 **Continuing Medical Education Series**
12 Noon-1 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center)

OBSTETRICS/GYNECOLOGY

June

8- **Annual Meeting**
9 Trump Plaza Hotel Casino, Atlantic City
(New Jersey Obstetrical and Gynecological Society)

16- **Risk Management**
17 **in Obstetrics and Gynecology**
8 A.M.-5 P.M.—The Diplomate Hotel, Atlantic City
(UMDNJ)

OCCUPATIONAL MEDICINE

June

6 **Occupational Asthma in New Jersey**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ)

ONCOLOGY

May

9 **Tumor Board Conference**
12 Noon-1 P.M.—Memorial Hospital of Salem County, Salem
(Memorial Hospital of Salem County)

11 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley Hospital Center, Sussex
(Wallkill Valley Hospital Center)

16 **First Annual Joint Meeting**
6:30-9:30 P.M.—The Manor, West Orange
(Head and Neck Oncology and Radiation Oncology Sections—AMNJ)

24 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(Newcomb Medical Center)

June

8 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley Hospital Center, Sussex
(Wallkill Valley Hospital Center)

13 **Tumor Board Conference**
12 Noon-1 P.M.—Memorial Hospital of Salem County, Salem
(Memorial Hospital of Salem County)

28 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(Newcomb Medical Center)

PEDIATRICS

May

3 **Pediatric Grand Rounds**
10 8:30-9:30 A.M.—Robert Wood
17 Johnson Medical School, MEB,
24 102, New Brunswick
(UMDNJ)

4 **Sudden Infant Death**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(South Jersey Hospital System)

PSYCHIATRY

May

1 **Anxiety and Stress**
8:30-10 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

3 **Case Seminars To Improve**
17 **Psychotherapeutic Technique**
8-10 P.M.—2 West Northfield Road, Livingston
(Advanced Psychiatric Study Group)

PHILADELPHIA HEART INSTITUTE
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Cardiology Update

designed for the physician and provides an intensive survey of the current status of clinical cardiology. . .

Wednesday, May 2, 1990

Surgery For Acquired Heart Disease

Moderator
Ami E. Iskandrian, M.D.

3:00-3:30 What is the optimal timing for aortic or mitral valve replacement? *W. Clark Hargrove, III, M.D.*

3:30-4:00 When is coronary artery obstruction significant? *William P. Santamore, Ph.D.*

4:00-5:00 Case presentations—Patients who need valve replacement and coronary artery bypass surgery *Stafford Smith, M.D.*

Panel discussion
Terry Langer, M.D., Thach N. Nguyen, M.D.,
William J. Untereker, M.D., Gary J. Vigilante, M.D.

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3 **PICA Syndrome and Psychiatry**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

8 **Grand Rounds**
15 8:30-10 A.M.—Dept. of
22 Psychiatry, Elizabeth General
29 Hospital, Elizabeth
(Elizabeth General Hospital)

10 **The Use of Video in Psychiatric Treatment**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

23 **High Anxiety**
All day—Carrier Foundation,
Belle Mead
(Carrier Foundation)

24 **Narcolepsy**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

31 **The Borderline Personality in the Hospital Setting**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

June

5 **Psychiatry Grand Rounds**
12 8:30-10 A.M.—Elizabeth General
19 Medical Center, Elizabeth
26 *(Elizabeth General Medical Center)*

6 **Psychiatric Aspects of AIDS**
2-3 P.M.—John E. Runnells
Hospital of
Union County,
Berkeley Heights
(AMNJ)

7 **Case Seminars To Improve Psychotherapeutic Technique**
8-10 P.M.—2 West Northfield
Road, Livingston
(Advanced Psychiatric Study Group)

7 **Brain, Biology, and Behavior**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

14 **Maintenance ECT: When and How?**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

21 **Effects of Brain Injury on Behavior and Emotions**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

RADIOLOGY

May

14 **Ultrasound**
7-8 P.M.—Wallkill Valley General
Hospital, Sussex
(AMNJ)

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17 **1990 Scientific Meeting**
7:30-9:30 P.M.—Saint Barnabas
Medical Center, Livingston
(Radiological Society of New Jersey-Diagnostic Section, AMNJ)

24 **Visiting Professor Program**
1:30-5 P.M.—Saint Barnabas
Medical Center, Livingston
(Saint Barnabas Medical Center)

SURGERY AND ITS SPECIALTIES

May

1 **Weekly Vascular Case**
8 **Conference**
15 7:30-8:30 A.M.—Robert Wood
22 Johnson Medical School, MEB,
29 108B, New Brunswick
(UMDNJ)

6 **Surgical Treatment of Cardiothoracic Disease**
10-11 A.M.—New Jersey Medical
School, MSB, 506B, Newark
(UMDNJ)

10- **Fourth Annual Meeting**
13 Sheraton Boston Hotel and
Towers, Boston
(Eastern Vascular Society)

26 **Englewood Surgical Society Lecture Series**
8-10 P.M.—Englewood Club,
Englewood
(Englewood Surgical Society)

26 **Morbidity and Mortality Conference**
8:30-10 A.M.—New Jersey
Medical School, MSB, 506B,
Newark
(UMDNJ)

June

5 **Weekly Vascular Case**
12 **Conference**
19 7:30-8:30 A.M.—Robert Wood
26 Johnson Medical School, MEB,
108B, New Brunswick
(UMDNJ)

8 **Diagnosis and Surgical Management of Esophageal Reflux and Hiatus Hernia**
1-2 P.M.—North Princeton
Developmental Center, Princeton
(AMNJ)

20 **High-Risk Surgery**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

UROLOGY

May

4 **Urology Grand Rounds**
11 New Jersey Medical School,
18 MSB, C600, Newark
25 *(UMDNJ)*

HU

Hahnemann University

Department of Medicine

WEDNESDAYS GRAND ROUNDS

8:30 A.M.-9:30 A.M.
April-May 1990

APRIL 1990

April 4, 1990

CARDIAC ELECTROPHYSIOLOGY: EVOLVING DIAGNOSTIC AND THERAPEUTIC MODALITIES
John D. Fisher, M.D.
Professor of Medicine
Director, Cardiac Arrhythmia Service
Acting Director, Division of Cardiology
Montefiore Medical Center
New York, NY

April 11, 1990

MEDICAL MANAGEMENT OF GALLSTONE DISEASE
Hans Fromm, M.D.
Professor of Medicine
Director, Division of Gastroenterology
The George Washington University
Washington, DC

April 18, 1990

ENDOCRINOLOGY AND METABOLISM: RECENT ADVANCES
Leslie I. Rose, M.D.
Professor of Medicine
Director, Division of Endocrinology and Metabolism
Hahnemann University
Jeffrey L. Miller, M.D.
Associate Professor of Medicine
Division of Endocrinology and Metabolism
Hahnemann University

April 25, 1990

PROSTHETIC VALVE ENDOCARDITIS
William E. Dismukes, M.D.
Professor & Vice Chairman for Educational Programs
Department of Medicine
University of Alabama
Birmingham, AL

MAY 1990

May 2, 1990

VENOUS THROMBOEMBOLIC DISORDERS: UPDATE 1990
John C. Hoak, M.D.
Director, Division of Blood Diseases and Resources
National Heart, Lung and Blood Institute
National Institutes of Health
Bethesda, MD

May 9, 1990

IMMUNE MECHANISMS: BREAKTHROUGHS IN IMMUNOSUPPRESSION
George H. Hitchings, Jr., Ph.D., D.Sc.
Nobel Prize Winner 1988 in Medicine and Physiology
Duke University
Durham, NC
Adjunct Professor of Pharmacology
University of North Carolina
Chapel Hill, NC
Scientist Emeritus
Burroughs Wellcome Co.
Terry Strom, M.D.
Professor of Medicine
Harvard Medical School
Director of Clinical Immunology
Beth Israel Hospital
Boston, MA

May 16, 1990

INFECTIOUS DISEASES: NEWEST ADVANCES
Abdolghader Molavi, M.D.
Associate Professor of Medicine & Surgery
Director, Division of Infectious Diseases
Hahnemann University

May 23, 1990

"NEW FASHION" CLINICAL PATHOLOGIC CONFERENCE
Kenneth Cohen, M.D.
Associate Professor of Medicine
Director, Internal Medicine Residency Program
Hahnemann University

May 30, 1990

"OLD FASHION" CLINICAL PATHOLOGIC CONFERENCE
Eugene Coodley, M.D.
Professor of Medicine
Univeresity of California, Irvine
Director of Geriatric Medicine
Longbeach VA Hospital
Longbeach, CA

WEDNESDAYS MEDICAL SEMINAR SERIES

8:30 A.M.-3:00 P.M.

APRIL 25, 1990
Infectious Diseases: Treatment of Difficulty and Opportunistic Fungal Infections
GUEST FACULTY
William E. Dismukes, M.D.
Professor and Vice-Chairman
Department of Medicine
Univ. of Alabama School of Medicine
David J. Drutz, M.D.
Adjunct Professor of Medicine
Univ. of Pennsylvania School of Medicine
Adjunct Professor of Microbiology & Immunology
Temple University Medical School
Thomas J. Walsh, M.D.
National Cancer Institute
National Institutes of Health
HAHNEMANN UNIVERSITY FACULTY
Emily A. Blumberg, M.D.
Abdolghader Molavi, M.D. (Course Director)
Craig A. Wood, M.D.

MAY 9, 1990
The Age of Immunosuppressive Therapy and Organ Transplantation
GUEST FACULTY
George H. Hitchings, Jr., Ph.D., D.Sc.
Nobel Laureate, 1988, Medicine and Physiology
Adjunct Professor of Pharmacology & Experimental Medicine
Duke University
Adjunct Professor of Pharmacology
University of North Carolina
Scientist Emeritus, Burroughs Wellcome & Co.
Terry Strom, M.D.
Professor of Medicine
Harvard Medical School
Director of Clinical Immunology
Beth Israel Hospital
President
American Society of Immunology

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IN MEMORIAM

Robert J. Andrus. At the untimely age of 35, Robert John Andrus died on December 30, 1989. A psychiatrist with a private practice in East Rutherford, Dr. Andrus was a member of our Bergen County component. Born in Jersey City, Dr. Andrus earned his medical degree from UMDNJ-New Jersey Medical School, Newark, in 1980; he received his New Jersey medical license the following year. During his short career, Dr. Andrus was affiliated with Bergen Pines County Hospital, Paramus. Dr. Andrus was a member of the American Psychiatric Association and of the AMA, and was a diplomate of the American Board of Psychiatry.

Laurence A. Donahue. After a lengthy illness, neurosurgeon Laurence Austin Donahue, MD, a member of our Monmouth County component, died on January 1, 1990. Born in 1926 in Warren, Ohio, Dr. Donahue was awarded his medical degree from Marquette University Medical School, Wisconsin, in 1954. After graduation, he served an internship at St. Elizabeth's Hospital, Ohio, and a residency at the Cleveland Clinic, Ohio. In 1960, Dr. Donahue received his license to practice in New Jersey. In addition to membership in the state society, Dr. Donahue was a member of the American Medical Association and a fellow of the Congress of Neurological Surgeons. During his career, Dr. Donahue was affiliated with Monmouth Medical Center, Long Branch, and Riverview Hospital, Red Bank.

Mary V. Elkin. At the age of 64, Mary Versakos Elkin, MD, died on December 31, 1989. A dermatologist, Dr. Elkin was on the staff of Hackensack Medical Center since 1961, and was an attending physician at Bergen Pines County Hospital, Paramus. Born in 1925 in Passaic, Dr. Elkin was awarded her medical degree from the University of Zurich Medical School, Switzerland, in 1956. She completed an internship at Beth-El Hospital, New York, in 1957, and in 1960 received her license to practice in New Jersey. Dr. Elkin was an active member of our Bergen County component and was a fellow of the Academy of Medicine of New Jersey.

Donald Green. Former marketing director for Hoffmann-La Roche, Inc., Donald Green, MD, died on January 7, 1990. After retiring, Dr. Green served as a consultant to numerous New Jersey pharmaceutical companies. Born in 1926 in Orange, Dr. Green earned his medical degree from New York University College of Medicine in 1950. He served an internship at Newark Beth Israel Medical Center in 1951, and completed a residency in internal medicine at the VA Hospital in Houston, Texas. In 1971, Dr. Green graduated with a marketing degree from the New School of Social Research, New York. Dr. Green was a member of our Essex County component and of the American Medical Association. During the Korean conflict, Dr. Green served in the United States Air Force as a captain and also as the chief of medicine at Andrews Air Force Base in Washington, DC.

William F. Jones. An emeritus member of our Somerset County component, William Felix Jones, MD, died on December 28, 1989. Born in 1914 in Pennsylvania, Dr. Jones earned his medical degree from Temple University Medical School, Pennsylvania, in 1939; the following year, he received his license to practice medicine in New Jersey. He served an internship at Atlantic City Hospital, Atlantic City, and a residency at Somerset Hospital, Somerville. A general practitioner, Dr. Jones was affiliated with Somerset Medical Center during his lengthy career. Dr. Jones was a fellow of the American Academy of Family Physicians and a member of the American Medical Association. After his retirement, Dr. Jones relocated to Winston-Salem, North Carolina. During World War II, Dr. Jones served in the medical corps as a captain.

Marion F. Kaletkowski. A past-president of the Passaic County Medical Society, Marion Francis Kaletkowski, MD, died on December 20, 1989. Born in 1914 in Lodi, Dr. Kaletkowski earned his medical degree from Georgetown University Medical School, Washington, DC, in 1939. He completed a residency in anesthesiology at St. Vincent's Hospital, New York, and an internship at St. Mary's Hospital, Passaic. Dr. Kaletkowski received his license to practice in New Jersey in 1940. Dr. Kaletkowski served as medical director and anesthesiologist at St. Mary's Hospital, for the next 40 years. During his lengthy career, Dr. Kaletkowski was the president of the Passaic

County Mental Health Association, a diplomate of the American Board of Anesthesiology, and a member of our Passaic County component, of the American Society of Anesthesiologists, and of the American Medical Association. He also served as public health officer for Clifton for over 25 years. During World War II, Dr. Kaletkowski was chief of anesthesia and operating rooms with the 61st General Hospital in England.

Joseph J. Kohn. Word has been received of the death of Joseph J. Kohn, MD, on November 20, 1989. Born in Philadelphia, Pennsylvania, Dr. Kohn earned his medical degree from the University of Michigan Medical School in 1935; he received his license to practice in New Jersey the following year. An ophthalmologist with St. Francis Medical Center, Trenton, Dr. Kohn was a member of our Mercer County component and a fellow of the American Academy of Ophthalmologists and Otolaryngologists. From 1942 to 1946, Dr. Kohn was a captain in the United States Air Force.

Vincenzo R. Onorato. Pompton Lakes physician, Vincenzo Raffaele Onorato, MD, died on December 27, 1989. Born in 1910 in Montclair, Dr. Onorato earned his medical degree from Royal University of Naples, Italy, in 1939. He served his residency at All Souls Hospital, Morristown, in the early 1940s. From 1942 to 1946. Dr. Onorato served the United States Army Medical Corps, attaining the rank of major; he received two Bronze Stars, the American Campaign Medal, the Victory Medal, the Asiatic/Pacific Campaign Medal, and Meritorious Service Unit Plaque. Affiliated with Chilton Memorial Hospital, Pompton Plains, St. Vincent's Hospital, Montclair, and St. Joseph's Hospital and Medical Center, Paterson, Dr. Onorato was a member of our Passaic County component and of the American Medical Association. In 1989, Dr. Onorato was honored with MSNJ's Golden Merit Award for 50 years of medical service.

James H. Thorpe. At the untimely age of 61, James Hancock Thorpe, MD, died on December 24, 1989, of a heart attack. Born in 1928 in Orange, Dr. Thorpe earned his medical degree from Columbia University College of Physicians and Surgeons, New York, in 1953. He served a residency and fellowship at IM Strong Memorial Hospital, Rochester, New York. From 1965 to 1973, Dr. Thorpe was senior military consultant in medicine to the USAF surgeon general, rising to the rank of colonel; he was awarded the USAF Commendation Medal. Dr. Thorpe was a member of our Mercer County component before relocating to California in 1989, and was a member of the Publication Committee for *NEW JERSEY MEDICINE.* In 1989, he coedited a special issue on continuing medical education for the state journal. Dr. Thorpe was a member of the American Medical Association, of the American Society of Internal Medicine, and of the American Psychosomatic Society; he was a fellow of the American College of Physicians and of the American College of Gastroenterology. Dr. Thorpe served as medical director for Lower Bucks Hospital, Bristol, Pennsylvania.

John J. Torppey. A specialist in diabetes, John Joseph Torppey, MD, died on January 9, 1990. Dr. Torppey had practiced privately since 1937 in Newark. He was awarded his medical degree from Georgetown School of Medicine, Washington, DC, in 1934, and served an internship at Essex County Hospital, Belleville, and City Hospital, Newark. During his illustrious career, Dr. Torppey was affiliated with Saint James Hospital, Presbyterian Hospital, both in Newark; Essex County Hospital Center; and East Orange General Hospital. A retired member of our Essex County component, and of the American Medical Association, Dr. Torppey held various positions in the medical community: board member of the Essex County Tuberculosis League, the New Jersey Appeal Board Selective Service System, and the Advisory Board of Essex County Hospital; past-president of the New Jersey Diabetes Association, the Essex County Medical Society, the Essex County Services for the Chronic Ill, and the Essex County Blood Bank; vice-chairman of the subcommittee for the aging, Newark; medical director of the Community Coordinated Home Care Program; consulting physician for All Souls Hospital, Morristown; chief of the Diabetic Clinic at Presbyterian Hospital; and member of the boards of trustees of the Essex County Services for the Chronically Ill and of the New Jersey Diabetes Association. During World War II, Dr. Torppey was chief of medical services on the Army hospital ship, Blanche F. Sigman. He retired to Toms River in 1978.

Louis A. Trevisan, Jr. After a brief illness, Louis Alphonse Trevisan, Jr, MD, died on December 22, 1989. Born in 1924 in Newark, Dr. Trevisan received his medical degree from Georgetown University Medical School, Washington, DC, in 1947 and was awarded his New Jersey license in 1948. An anesthesiologist, Dr. Trevisan was affiliated with Clara Maass Medical Center, Belleville; Columbus Hospital, Saint Michael's Medical Center, and Presbyterian Hospital, all in Newark; and Shore Memorial Hospital, Somers Point. Dr. Trevisan was a member of our Essex County component and of the American Medical Association. From 1949 to 1951, Dr. Trevisan served in the United States Navy, and also was a veteran of the Korean War.

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1. Goldwyn RM: Subcutaneous mastectomy. *NJ MED* 74:1050-1052, 1977.

2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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PROFESSIONAL LIABILITY

U.S. TORT SYSTEM COSTS INCREASE

The cost of the U.S. tort system, including claims payments, administrative costs, and attorney's fees, is increasing rapidly, far outdistancing these costs in other countries, says a recent report prepared by the Tillinghast division of Towers, Perrin, Forster & Crosby Inc.

These costs have risen from $7.9 billion in 1965 to $117 billion in 1987 and now represent 2.6 percent of the gross national product—triple the percentage of the GNP spent in 12 other industrialized nations.

Only in one other country—Switzerland—did tort system costs exceed more than 0.6 percent of the GNP and there the percentage was 0.8 percent. Here is the percentage of GNP in 1986 in some other nations studied: Australia, 0.3; Denmark, 0.4; Japan, 0.4; Spain, 0.4; Italy, 0.5; West Germany, 0.5; Austria, 0.6; Canada, 0.6; and France, 0.6. Figures were not available for 1986 but in 1985 Belgium and the United Kingdom each spent 0.5 percent of the GNP for their tort systems.

"Whereas tort costs in other countries have remained stable over the last 20 years, our costs have escalated," said Robert Sturgis of Tillinghast's property/casualty division.

The report suggested one possible reason other countries spend less on tort systems is that they have more extensive welfare systems that presumably take care of victims and reduce the need to sue.

A copy of the report, "Tort Cost Trends: An International Perspective," is available on request from Towers, Perrin, Forster & Crosby Inc., Marketing Services, 100 Summit Lake Drive, Valhalla, NY 10595. (Reprinted with permission from *Medical Liability Monitor,* Winnetka, IL 60093. Volume 14, Number 12, December 21, 1989)

HOSPITAL FUNCTIONS WITH CLOSED STAFF

Two surgeons were not entitled to a preliminary injunction against a hospital that decided to function with a closed staff for performing heart bypass operations, a California appellate court ruled. The two board certified surgeons had been members of the hospital's medical staff for more than ten years. They performed a majority of the cardiac extracorporeal bypass surgeries performed at the hospital. The physicians experienced a very low mortality rate, but the overall mortality rate of bypass operations at the hospital was 8.4 percent, an unacceptably high rate for the hospital.

A committee determined that the problems identified at the hospital resulted from the fact that a substantial number of independent surgeons performed bypass surgery at the hospital and other hospitals spread over a wide geographical area. The hospital decided to drastically change its heart surgery program from the open staffing structure it had operated under for a number of years to a closed, exclusive program directed by a highly qualified surgeon under contract with the hospital and working with a fairly constant team of supportive personnel. The hospital felt this approach would foster uniformity, teamwork, and a lower mortality rate.

The two surgeons refused to be in charge of the new program because they did not wish to confine their practices to the hospital and did not want responsibility for quality control. After the hospital notified all of the bypass surgeons on its staff that after July 19, 1988, they would not be able to perform independent bypass surgery at the hospital, the two surgeons filed suit.

Affirming the trial court's denial of a preliminary injunction, the appellate court said that the hospital's decision to function with a closed rather than an open system did not interfere with any vested interest of the staff physicians. The hospital's interest in improving patient care and reducing mortality rates outweighed potential adverse economic impact on the physicians. Hospitals had a right to make rational management decisions, even when exercise of that right might prove adverse to the interest of specific individual practitioners, the court said. *Redding v. St. Francis Medical Center,* 255 Cal. Rptr. 806 (Cal. Ct. of App., Feb. 28, 1989). (Reprinted with permission from *The Citation,* American Medical Association, Volume 60, January 15, 1990)

COUPLE SUES IVF PROGRAM

A husband and wife, in their attempt to obtain possession of their cryopreserved human pre-zygote, have a valid cause of action against the in vitro fertilization (IVF) program that stored the pre-zygote, a federal trial court in Virginia ruled. The husband (a physician) and his wife entered the IVF program at the Medical College of Hampton Roads, in Norfolk, Virginia, in 1986. At that time, the couple lived in the northeast. During the course of the treatment, they moved to California. The couple underwent the in vitro fertilization attempt on four separate occasions. None of these attempts resulted in pregnancy. Prior to the fourth attempt, the couple signed a cryopreservation agreement for cryopreservation of pre-zygotes. The agreement outlined the procedure and the couple's rights to the frozen pre-zygote(s). The IVF program physician then removed and fertilized six eggs, creating six embryos. The physician transferred five embryos to the mother's uterus and the sixth was cryogenically preserved pursuant to the procedures outlined in the agreement.

Approximately one year after freezing the sixth embryo, the couple sought to have the pre-zygote transferred from the IVF program in Virginia to an IVF program in Los Angeles, California, for an in vitro fertilization attempt. The physician at the Virginia IVF program refused to allow the transfer. The couple sued the Virginia IVF program for breach of contract, detinue, and violations of the 1st, 4th, 9th, and 14th amendments. The IVF program filed a motion to dismiss.

In support of their breach of contract claim, the couple claimed the Virginia IVF program's continued dominion and control over the frozen pre-zygote is contrary to the language of the cryopreservation agreement. The agreement provided:

1. The couple may discontinue participation at any time and that the program would not continue to store the pre-zygotes after they withdrew.
2. The couple has the principal responsibility to decide on the disposition of the pre-zygotes.
3. If the couple divorced, legal ownership of pre-zygotes must be determined in a property settlement.
4. If the couple decides in the future to cease attempts to initiate pregnancy, they may choose one of three options for their frozen pre-zygotes: donate to another couple (whose identity will remain unknown), donate for approved research investigation, or thaw but not allow to undergo further development.

The Virginia IVF program and its physicians contended that the couple's proprietary rights were limited to the three options enumerated in the contract because there is no established protocol for the inter-institutional transfer of pre-zygotes.

The court found that the three options apply only if the couple no longer wishes to attempt pregnancy. Moreover, the court held that the cryopreservation agreement created a bailment relationship which imposes on the bailee (the IVF program), when the purpose of the bailment has terminated, "an absolute obligation to return the subject matter of the bailment to the bailor" (the couple). The cryopreservation agreement indicated that the IVF program and its physicians recognized the limits of their possessory interest by recognizing the couple's proprietary rights in the pre-zygote, i.e. the reference in the agreement to the couple's principal responsibility to determine the disposition of the frozen pre-zygotes; the requirement that in the event of divorce, legal ownership must be set forth in a property settlement; and the repeated references to "our [the couple's] pre-zygote."

The court found valid the couple's claim of detinue (a cause of action for the recovery of specific personal property unjustly detained) based on much of the reasoning used in the finding of a bailment.

The couple based their claim of constitutional violations on the theory that the IVF program's exercise of dominion and control over the pre-zygote violated their constitutional right to reproductive privacy. The court found that the Medical College of Hampton Roads was a governmental entity but had a great deal of autonomy over its internal operations and the discharge of its statutory duties and powers. Therefore, according to the court, the IVF program of the Medical College was not entitled to 11th amendment immunity (state immunity from suits by residents of another state).

Thus, the court denied the IVF program's motion to dismiss any of the couple's claims, and the suit will proceed.

COMMENT This court held that frozen pre-zygotes are the personal property of the couple. It is unclear why the IVF program refused the couple's request for the inter-institutional transfer of the pre-zygote. While the terms of the agreement appeared to cover all possibilities, e.g. divorce, it did not anticipate the possibility of a request for an inter-institutional transfer. Because it is not possible to foresee every possibility, legal theories, such as bailment, developed over centuries, provide a consistent framework for settling disputes.

Commentators fear that cases such as this are likely to increase in the future. There are over 4,000 frozen pre-zygotes in the United States (*Time,* July 24, 1989), but state laws often do not address the questions to be resolved or do not do so realistically. For instance, one problem could arise if a statute defines a pre-zygote as a person. Does the pre-zygote have the right to inherit? Also, a problem could arise if the couple donates the pre-zygote to another couple. Do they have to go through adoption proceedings?

Many ethicists believe a couple's claim to use of its frozen pre-zygote has a basis in law and common sense. Most ethicists agree that the couple's right is not absolute; the couple should not be able to authorize inappropriate experimentation. (Terrie A. Rymer, JD, staff attorney, Health Law Division, AMA. Reprinted with permission from *The Citation,* American Medical Association, Volume 60, January 1, 1990) ☐

DR • JOSEPH • MOLEA

"It's uniquely sensitive, flexible, allowing you the freedom to accomplish otherwise impossible tasks. And, my Army Reserve pay plus my stipend pays me up to $11,000 per year. I'm a fourth year general surgical resident at Episcopal Hospital in Philadelphia with plans to subspecialize in hand surgery. When I was introduced to the Reserve's new STRAP program, the financial rewards were obvious and the flexibility during my training made it unbeatable. I have been able to postpone my Reserve participation until I have time, and still receive my STRAP stipend. My opportunities to work in hand surgery at Walter Reed, to work on a health care development project in Honduras, to experience medicine in the broader sense would not exist were I not in the Army Reserve. It's worth the service obligation. It's a win-win situation."

If you are a resident specializing in anesthesiology, general surgery, including colon/rectal, pediatric, cardio/thoracic, plastic, orthopedic, peripheral/vascular, and neurosurgery, and would like more information on the Army Reserve Specialized Training Assistance Program (STRAP), call 1-800-USA-ARMY.

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MSNJ NEWSLETTER

KUDOS FOR NEW JERSEY MEDICINE

NEW JERSEY MEDICINE has been awarded the Special Prize in the Sandoz Medical Journalism Competition for 1990. The award for outstanding appearance and editorial qualities for a state medical association publication, recognizes the unique importance of state professional journals. "Readers of medical and pharmaceutical publications receive stacks of journals, magazines, and other mail," said Dr. Craig Burrell, president of Sandoz. "It is a tribute to the editorial staffs of these low-budget local publications that they are so avidly read by many readers who rank them with major national media." This is MSNJ's fifth award in the past ten years for publishing a consistently high-quality journal.

LEGAL NOTES

What should you do when an investigator from the State Board of Medical Examiners or some other government agency appears at your door? This question has been the topic of a great deal of legal activity. The situation ordinarily arises when an investigator, badge in hand, asks to speak to a physician about a particular case or issue. The physician, who does not want to be rude or antagonistic, invites the investigator into the office, and finds that he is the target of what could well be a serious action. Before the meeting ends, the investigator hands the physician a subpoena, demanding he either immediately turn over certain records, or appear personally, in Newark or some other place, to deliver the records in the future.

Most physicians when confronted with this situation talk to the investigator, permit inspection of their facilities, and turn over their records. Yet, in most cases this is absolutely the wrong thing to do. Not only may the physician provide more information than necessary, he unwittingly may provide information that could result in disciplinary action. If the investigator is from an agency other than the State Board of Medical Examiners, the physician also may breach patient confidentiality—even though the investigator has a subpoena.

Many years ago, the courts in the state held that no one could be required to provide immediate testimony or immediately turn over records. As a result, the "forthwith" subpoena was ruled unconstitutional. In an effort to get around that court ruling, the State Board of Medical Examiners and others now issue subpoenas that give the physician the choice of either turning over documents immediately, or personally delivering the materials at a future date. Do not be intimidated by the subpoena. You need not personally deliver the documents, regardless of what the subpoena states. You do have time to consult with an attorney before providing any information—written or oral. Also, you generally do not have to permit an inspection of your offices.

If investigators arrive at your door, accept any documents they hand you, and politely advise them that you will contact them after speaking with your attorney.

On a related note, many physicians have been receiving demands from attorneys for patient records. Be aware that without a recently signed patient authorization (no more than six months old) that specifically authorizes the release of the records in your possession, you are prohibited, by law, from turning over such documents. The fact that the request may be accompanied by a subpoena makes no difference. In these circumstances, you should advise the attorney requesting the records that you require an appropriately signed, original patient release. In addition, you are entitled to a reasonable fee for the cost of copying any records requested. A reasonable fee depends upon the circumstances, but fees within the range of $.50 to $1.50 per page for photocopying and $2.00 to $10.00 for copies of x-rays are not unusual, depending upon the amount of work and expense involved. Ordinarily you have 30 days to provide these materials to the patient or patient's representative, absent some emergent situation. Do not be intimidated by an attorney who threatens to subpoena your testimony if you do not turn over records without charge. There is no good faith basis for him to do so and, if the attorney attempts to issue such a subpoena, you should immediately contact the Medical Society of New Jersey. Many counties have reciprocal agreements with bar associations and the offending attorney will be advised of the impropriety of his efforts.

In short, do not talk to investigators. Tell them that you will contact them after speaking to your attorney. Do not give them access to your offices; do not show them any documents. Rather, contact your health care attorney immediately to understand your rights, and provide information only after a full analysis of your position. If you are approached by a representative of the State Board of Medical Examiners and belong to the Prepaid Legal Services Program endorsed by the Society, call Kern Augustine Conroy & Isele; after hours, call the 24-hour emergency number for assistance. If not, call the health care lawyer of your choice. ☐ Kern Augustine Conroy & Isele, P.A.

CATASTROPHIC ILLNESS IN CHILDREN

Applications are available for the Catastrophic Illness in Children Relief Fund Program. Created by legislation to provide financial assistance to families whose children have experienced serious illnesses or conditions that have not been covered fully by insurance or other program benefits, program applications are available by calling 609/292-0600. To receive assistance, families must meet three criteria: medical expenses not covered by insurance must exceed 30 percent of a family's income, if income is less than $100,000 or 40 percent if the income is over $100,000; the child must be 17 years of age or younger; and the parents or guardians must be resident(s) of New Jersey for at least six months prior to date of the application.

POISON INFORMATION & EDUCATION SYSTEM

The New Jersey Poison Information and Education System (NJPIES) has been serving professionals for over eight years. In addition to answering calls concerning suspected poisonings, NJPIES answers drug information requests from physicians and other health care personnel. For information about adverse drug reactions, drug interactions, or drug dosing for patients with renal failure or undergoing dialysis, call NJPIES; also call for assistance in identifying a drug. NJPIES is available 24 hours a day, seven days a week; nonemergency calls can be answered, Monday to Friday, from 8 A.M. to 5 P.M. Place emergency calls immediately. The number to call is 1/800/962-1253.

RETIREMENT THROUGH SUCCESSFUL MONEY MANAGEMENT

Due to tremendous interest, the seminar sponsored by the Medical Society of New Jersey and the AMA Investment Advisers, Inc. will be held again. "Retirement Planning Through Successful Money Management" will be held at MSNJ headquarters on June 13 and June 14, 1990.

The program, given in its entirety on both days, runs from 9:30 A.M. to 4:30 P.M. Lunch will be provided as well as refreshments during the morning and afternoon breaks. You will learn how to set your personal financial goals, plan for retirement, lower your taxes, and develop a financial plan. In addition, the seminar will cover a variety of investment alternatives such as stocks, bonds, mutual funds, real estate, and much more. You can register for the seminar by calling the Department of Medical and Insurance Affairs at MSNJ headquarters, 609/896-1766. The registration deadline is June 1, 1990; space is limited. Members and spouses are invited to attend.

AIDS POLICY REPORT

The AMA is taking a stand in favor of mandatory contact tracing through state health agencies for all persons infected with HIV. The statement came in the AMA's policy update report on AIDS. A national study should also be done to find out the degree of HIV infection in the United States, the AMA said. This is the only way to monitor the course of AIDS, to plan treatment, and to evaluate prevention and care, asserted the AMA. The report also confirmed the AMA's determination to study the cost of care for patients in each stage of the disease; to support funding for research and treatment; to advance HIV training for primary care MDs and specialists; to encourage physicians to educate patients about HIV; and to endorse insurance indemnification of students and residents infected with HIV on the job.

WHAT ARE YOU SAYING ABOUT CME?

The question, "Is quality CME—at acceptable cost—really accessible to you?" received a 78 percent yes answer and a 22 percent no answer, and the question, "Has CME caused you to change the way you provide treatment to patients in the last year?" received a 65 percent yes answer and a 35 percent no answer.

HEALTH CARE COSTS

If your company's health insurance bills are going haywire, you are not alone. The average cost per employee now is $3,000 and rising 20 to 30 percent a year and the cost is greater for small firms with big claims. There is only one way to get a handle on costs, so say specialists in employee health insurance programs. Get involved, manage them, and keep close watch. They eat profits. Companies no longer can be passive payers.

REGIONAL MEDICAL LIBRARY NETWORK

Region 1 of the Regional Medical Library (RML) Program will be separated into new regions in 1991, and the name of the program will be changed to reflect its national scope. These changes will be made to focus attention on fundamental changes in the mission and goals of the National Library of Medicine's programs to insure that health professionals have timely and convenient access to needed biomedical information. Region 1 will consist of New York, New Jersey, Pennsylvania, Delaware, and the Commonwealth of Puerto Rico.

GIBBS TO HEAD HUMAN SERVICES

Governor Florio has named Albert J. Gibbs to head the State Department of Human Services. Mr. Gibbs comes from the Washington State Department of Social and Human Services and also served as deputy commissioner of human services under former Governor Brendan Byrne.

DOCTOR OF THE YEAR

Ralph Fioretti, MD, has been given the "Doctor of the Year" award by the New Jersey Academy of Family Physicians. Fioretti has maintained a family practice in Rochelle Park for over 40 years. He serves on the executive committee of the Board of Governors at Hackensack Medical Center and also is medical director of a 300-bed nursing home complex. Dr. Fioretti is a past-president of the Medical Society of New Jersey and of the Bergen County Medical Society. Dr. Fioretti represents MSNJ as a delegate to the American Medical Association.

WASTE DISPOSAL

Approximately 60 New Jersey hospitals have agreed to participate in a NJHA group purchasing contract for the removal of medical waste. The two-year contract was awarded to Medical and Hazardous Waste Management Corp. of New York.

UNIVERSAL HEALTH CARE

Representatives of Citizen Action, the state's largest citizen coalition with 65 affiliated labor and community groups, called for a federal universal health care system to better serve the health care needs of the nation. Victor DeLuca, director of the Ironbound Community Corp., asked that all members of the state's congressional delegation cosponsor the "Health For All" resolution introduced by Rep. Henry Waxman (D-California). The resolution proposes a national health care system.

HEALTH CARE INSURANCE COMMISSION

Assemblymen John V. Kelly (R-Essex) and Patrick J. Roma (R-Bergen) solicited Governor Florio to establish an emergency commission to cope with New Jersey's worsening health care insurance problems. The legislators want the commission to review the Uncompensated Care Trust Fund, the hospital rate reconciliation system, and the availability of individual health insurance, among other matters. The Assemblymen were prompted to call for the emergency commission by increased public awareness of an impending crisis in health insurance.

ICD-9-CM CODING APPEALS

NJDOH has received ICD-9-CM coding appeals from several hospitals. The appeals stated that the October 1987 changes in ICD-9-CM coding mandated by the federal government and mapped into New Jersey Grouper Version 2 DRGs by the Department, caused reduced hospital reimbursement due to case migrations among DRGs. The migrations identified by the appeal were as follows: Group I—DRGs 115-118 migrating to DRGs 442-443 (Pacemakers); Group II—DRGs 154-156 migrating to DRGs 182-184 (Endoscopies); Group III—DRGs 87-89 migrating to DRG 101 (Respiratory).

The Department's recommendation for each of these areas is as follows: Group I—no adjustment will be recommended for this grouping of DRGs. The Department believes that the revision to the procedure code could not have caused a change in revenue for these hospitals. Group II—hospitals may elect to recode and resubmit all of its 1988 records within this DRG grouping in accordance with coding definitions. The hospital must notify the Department of its intent to recode by April 16, 1990, and all documentation must be submitted by May 15, 1990. The economic impact requirement of the lower of $10,000 or 0.1 percent DPC revenue must be met for an adjustment to proceed. Group III—no adjustment will be recommended for this grouping of DRGs. Although the changes in mapping of the respiratory codes could result in revenue changes, the differences were not large and may be offset by other gains.

HUMAN SERVICES DEPT. REQUESTS

The Department of Human Services made a request to the Office of Management and Budget at the end of the Kean administration for a $300 million funding increase. Human Services requested $2.5 billion for the new fiscal year, an increase of $300 million. Nearly half of the increase is attributable to projected rises in Medicaid program costs. Based on the department's estimate, the state's share of Medicaid funding will increase from $865 million to $1 billion. Human Services also is asking for $28 million more for the 2,500 patients in the seven state psychiatric facilities, and $36 million more for the Division of Youth and Family Services.

NEWARK TO RECEIVE PROPOSED AIDS FUNDS

Under a Senate emergency AIDS assistance proposal introduced by Senator Edward M. Kennedy (D-Massachusetts), Newark would be eligible for $6.5 million in federal aid. The bill would provide a total of $600 million for AIDS work nationwide, including $300 million of emergency aid to cities with over 2,000 AIDS cases, such as Newark, which has 3,339 cases. The emergency funds would go to health care facilities to service low-income AIDS cases and to community-based outpatient health and support services.

MEDICARE ASC RATES ISSUED

The final notice of Medicare payment rates and revision of the Ambulatory Surgical Center (ASC) payment rate methodology was published in the *Federal Register* on February 8, 1990, after almost a two-year delay over implementation of the rule change. The final notice sets forth the revised payment rates based on a refined methodology using recent survey data from participating ASCs. The refinements include the establishment of eight payment groups rather than the six proposed groups and the four current groups. Only two of these eight groups contain cataract procedures. The new methodology incorporates into the rate computation the use of the HCFA wage index and the payment of $200 for an intraocular lens (IOL) inserted during cataract surgery. The rates are effective on March 12, 1990, rather than July 1, 1988, the original implementation deadline. The rates before wage adjustment are as follows:

Group 1	$247
Group 2	$332
Group 3	$381
Group 4	$469
Group 5	$535
Group 6 (includes IOL fee)	$705
Group 7	$743
Group 8 (includes IOL fee)	$814

The new methodology is based on revised data including a reassessment and reassignment of certain procedures to higher groupings when appropriate. Use of the revised ASC rates will be incorporated into the blend of payments methodology for ambulatory surgical procedures performed in a hospital outpatient department.

MEDICAID BUREAU PROPOSED

HCFA Administrator Gail Wilensky has recommended the creation of a Medicaid Bureau within the Health Care Financing Administration. This policy initiative is her first since being confirmed to her administrator position and is consistent with her goal of heightening Medicaid's status and visibility during her term. The plan would consolidate and merge 190 full-time Medicaid personnel currently spread throughout HCFA. The proposed bureau plan is being discussed with HHS Secretary Louis W. Sullivan, MD, and is expected to be approved. The director of the new bureau would report directly to Wilensky.

MEDICARE LAB TESTS COST TWICE AS MUCH

According to a recent report from Health and Human Services, Office of the Inspector General, physicians pay almost half as much as Medicare pays for clinical laboratory tests. The report found that physicians pay a lower amount for an entire group of tests while Medicare Part B pays for each test individually. The report recommended HCFA implement measures to eliminate the rate discrepancy including development of Medicare policies and procedures for group test rates.

BLUES MANAGED CARE PLANS

According to a recent report by InterStudy of Excelsior, Minnesota, six nationally managed care firms account for the largest market share of managed care enrollment of 27.8 million as of January 1989. Of the 27.8 million enrollees, 14.3 million or more than one-half were enrolled in managed care plans of Blue Cross and Blue Shield Association of Chicago, Illinois.

PHYSICIANS' SALARIES INCREASE

According to an American Medical Association report, physicians' 1988 net income increased approximately 11 percent from 1987 to a median of $120,000. The highest net income of all physician specialties is the surgeon's at approximately $208,000. Since 1985, the physicians' median net income increased approximately 26 percent. The range of physician average net income annual growth from 1981 to 1988 was 5.1 percent for general/family practice to 8.2 percent for pathology and 8.8 percent for surgery. The report indicated that the 1988 average annual physician salary increase outstripped the 7.5 percent increase in physician prices measured by the Consumer Price Index.

SURGERY ADMISSION RATE IS UP

According to the SMG Marketing Group in Chicago, admissions to U.S. hospitals in 1989 saw the percentage of surgical admissions rise to 67.5 percent as compared to 60.1 percent in 1985.

STUDY OF MALPRACTICE COSTS

A White House Domestic Policy Council has been established to study ways of reducing malpractice costs. At a recent talk at Johns Hopkins University, President Bush somewhat chastised physicians for practicing "defensive medicine," although agreeing that a way must be found to reduce rising costs. The study is being led by Stuart Gerson, assistant attorney general of the Justice Department and includes Health and Human Services Secretary Louis Sullivan, MD, on the Council.

OUTPATIENT CATARACT SURGERY

The Outpatient Ophthalmic Surgery Society of San Diego filed suit against the Department of Health and Human Services in the U.S. District Court in Washington, DC, challenging the payment rates for outpatient cataract surgery performed on Medicare patients. The Society claims that the payment rates violate the Medicare statute because they do not cover the cost of providing such surgery in the ambulatory surgery centers that are being reimbursed.

HEALTH CARE SHOWS HIGH PROFIT

U.S. Healthcare Inc., the for-profit Pennsylvania-based HMO, reported a 12 percent increase in membership and a 35 percent increase in revenues for 1989. Its net income of $28 million for 1989 was almost 700 percent above its 1988 income. The Company's membership rose to over one million last year when its HMOs in New Jersey, Connecticut, Delaware, Maine, New York, and Pennsylvania were taken into account.

DISSATISFIED WITH HMO PLANS

A study performed in the Chicago area, by Midwest Business Group on Health, found that current HMO enrollees want to switch health plans, they are less satisfied with their plan than non-HMO participants, and would not recommend a HMO to anyone. Of the nine enrollee satisfaction criteria, in only one of the criteria did HMOs win—protection against the cost of illness. Non-HMO plans scored almost 36 percent higher on the choice/continuity of care criteria, and almost 15 percent higher on the overall perceived quality criteria.

ANTI-FRAUD

According to Carl Schramm, president of Health Insurance Association of America (HIAA), the driving force behind anti-fraud activities is cost containment. HIAA indicated that health insurers could save an estimated $350 million by adopting a cost-containment program, and that 15 health insurers saved approximately $45 million last year because of these efforts. A survey of 110 health insurers found that in 1989 approximately 43 percent of the fraud cases involved services not being rendered, while approximately 33 percent involved improper dates or diagnoses.

PHYSICIAN REFERRALS According to the American Medical Association, overall physical referrals to their own facility dropped about 1 percent from 1988 to 1989. The most significant decline occurred with general and family practitioners whose self-referral percentage went from about 10 percent to about 5 percent. The study also noted that physicians earning $150,000 or more are making more self-referrals while those under $150,000 are making less self-referrals. Most physicians only have an investment in one facility, and started with no more than an initial investment of $10,000.

NOVELLO CONFIRMED Antonio Novello, MD, a pediatrician and AIDS expert, has been confirmed by the Senate as Surgeon General. Novello was a deputy director of the National Institute of Child Health and Human Development.

PROTECT MEDICARE House and Senate leaders continue to criticize the Bush Administration's proposed $5.6 billion spending reductions for 1991. Senate Finance Committee Chairman Lloyd Bentsen (D-Texas) referred to the magnitude of the proposed cuts as astounding. Bentsen urged HHS Secretary Louis W. Sullivan, MD, who testified during the Finance Committee's February 28 hearing, to work with members of the Committee to determine how Medicare spending can be reduced without "a major dislocation" of services needed by beneficiaries.

PENSION PLAN TERMINATIONS Two hospital chains, Hospital Corporation of America (HCA) and Humana, improperly withheld $28 million in Medicare payments from gains realized when they terminated their pension plans. The Office of Inspector General (OIG) alleges that HCA adjusted its reversion based on their interpretation of the regulations while Humana amortized its reversion over an eight-year period without any adjustment for Medicare.

MEDICAID AND UNINSURED The Social Security Advisory Council has been asked by HHS chief Louis Sullivan, MD, to focus on health care gaps for Medicaid and the uninsured. The Council will change its focus and concentrate on health care for children, the poor, and high-risk populations in the immediate future to meet Sullivan's demand.

MANDATORY COVERAGE If employer-sponsored health care coverage were made mandatory, the number of uninsured Americans would be reduced by two-thirds. Approximately 26 million of the 37 million uninsured Americans would be affected by the mandatory coverage, with 13 million employees covered through private coverage shifting onto their employer's coverage.

SMOKING COSTS In connection with his campaign to establish a smoke-free society, HHS Secretary Louis W. Sullivan, MD, released a report that shows nearly 380,000 Americans died last year from smoking-related diseases. This report indicates that smoking costs the country $52 billion annually in health care and lost productivity.

Not considered in Sullivan's $52 billion calculation is a report by the Cambridge, Massachusetts-based National Bureau of Economic Research which found that the average male smoker dies before receiving $20,000 in Social Security benefits and female smokers lose $10,000. This report concludes that if these people stop smoking, Social Security and Medicare programs would see their costs rise.

FINI "Learn from the mistakes of others. You can never live long enough to make them all yourself." ☐

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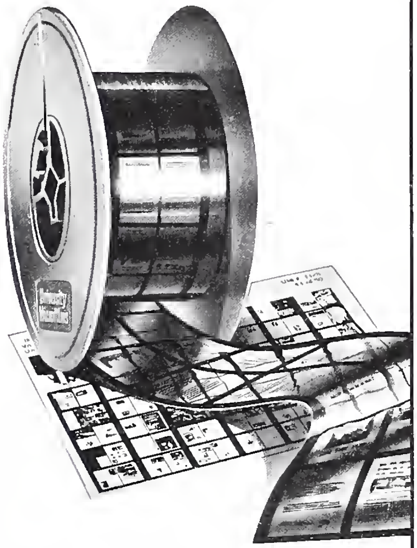

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LEVOXINE® *(Levothyroxine Sodium Tablets, USP)* For oral administration

The following is a brief summary. Before prescribing, please consult package insert.

INDICATIONS AND USAGE:

LEVOXINE (L-thyroxine) tablets are indicated as replacement or supplemental therapy for diminished or absent thyroid function, resulting from functional deficiency, primary atrophy, from partial or complete absence of the gland or from the effects of surgery, radiation or antithyroid agents. Therapy must be maintained continuously to control the symptoms of hypothyroidism.

CONTRAINDICATIONS:

L-thyroxine therapy is contraindicated in thyrotoxicosis, acute myocardial infarction and uncorrected adrenal insufficiency.

WARNINGS:

Drugs with thyroid hormone activity, alone or together with other therapeutic agents, have been used for the treatment of obesity. In euthyroid patients, doses within the range of daily hormonal requirements are ineffective for weight reduction. Larger doses may produce serious or even life-threatening manifestations of toxicity, particularly when given in association with sympathomimetic amines such as those used for anorectic effects.

PRECAUTIONS:

Caution must be exercised in the administration of this drug to patients with cardiovascular disease. Development of chest pains or other aggravation of the cardiovascular disease requires a reduction of dosage.

Patients on thyroid preparations and parents of children on thyroid therapy should be informed that replacement therapy is to be taken essentially for life. They should immediately report during the course of therapy any signs or symptoms of thyroid hormone toxicity, e.g., chest pains, increased pulse rate, palpitations, excessive sweating, heat intolerance, nervousness, or any other unusual event. In case of concomitant diabetes mellitus, the daily dosage of antidiabetic medication may need readjustment. In case of concomitant oral anticoagulant therapy, the prothrombin time should be measured frequently to determine if the dosage of oral anticoagulants is to be readjusted.

Partial loss of hair may be experienced by children in the first few months of thyroid therapy, but this is usually a transient phenomenon and later recovery is usually the rule.

Drug Interactions — In patients with diabetes mellitus, addition of thyroid hormone therapy may cause an increase in the required dosage of insulin or oral hypoglycemic agents.

Patients stabilized on oral anticoagulants who are found to require thyroid replacement therapy should be watched very closely when therapy is started.

Cholestyramine binds both T_4 and T_3 in the intestine, thus impairing absorption of these thyroid hormones. Four to five hours should elapse between administration of cholestyramine and thyroid hormones.

Estrogens tend to increase serum thyroxine-binding globulin (TBg). Patients without a functioning thyroid gland who are on thyroid replacement therapy may need to increase their thyroid dose if estrogens or estrogen-containing oral contraceptives are given.

Drug/Laboratory Test Interactions — The following drugs or moieties are known to interfere with laboratory tests performed on patients taking thyroid hormone: androgens, corticosteroids, estrogens, oral contraceptives containing estrogens, iodine-containing preparations, and the numerous preparations containing salicylates.

Carcinogenesis, Mutagenesis, And Impairment of Fertility — A reported apparent association between prolonged thyroid therapy and breast cancer has not been confirmed. No confirmatory long-term studies in animals have been performed to evaluate carcinogenic potential, mutagenicity, or impairment of fertility in either males or females.

Pregnancy-Category A — The clinical experience to date does not indicate any adverse effect on fetuses when thyroid hormones are administered to pregnant women.

Nursing Mothers — Minimal amounts of thyroid hormones are excreted in human milk. Thyroid is not associated with serious adverse reactions and does not have a known tumorigenic potential. However, caution should be exercised when thyroid is administered to a nursing woman.

Pediatric Use — The incidence of congenital hypothyroidism is relatively high. Routine determinations of serum (T_4) and/or TSH is strongly advised in neonates in view of the deleterious effects of thyroid deficiency on growth and development.

ADVERSE REACTIONS:

Adverse reactions are due to overdosage and are those of induced hyperthyroidism.

OVERDOSAGE — Excessive dosage of thyroid medication may result in symptoms of hyperthyroidism, which may not appear for one to three weeks after the dosage regimen is begun. The most common signs and symptoms of overdosage are weight loss, palpitation, nervousness, diarrhea or abdominal cramps, sweating, tachycardia, cardiac arrhythmias, angina pectoris, tremors, headache, insomnia, intolerance to heat and fever. If symptoms of overdosage appear, discontinue medication for several days and reinstitute treatment at a lower dosage level.

Complications as a result of the induced hypermetabolic state may include cardiac failure and death due to arrhythmia or failure.

Dosage should be reduced or therapy temporarily discontinued if signs and symptoms of overdosage appear.

Treatment of acute massive thyroid hormone overdosage is aimed at reducing gastrointestinal absorption of the drugs and counteracting central and peripheral effects, mainly those of increased sympathetic activity. Measures to control fever, hypoglycemia, or fluid loss should be instituted if needed.

DOSAGE FORMS AVAILABLE:

LEVOXINE (L-thyroxine) tablets are supplied as oval, color coded, potency marked tablets in 11 strengths: 12½ mcg (0.0125 mg) - maroon, 25 mcg (0.025 mg) - orange, 50 mcg (0.05 mg) - white, 75 mcg (0.075 mg) - purple, 100 mcg (0.1 mg) - yellow, 112 mcg (0.112 mg) - rose, 125 mcg (0.125 mg) - brown, 150 mcg (0.15 mg) - blue, 175 mcg (0.175 mg) - turquoise, 200 mcg (0.2 mg) - pink and 300 mcg (0.3 mg) - green, in bottles of 100 and 1000, and unit dose in cartons of 100 (10 strips of 10 tablets), 200 mcg and 500 mcg injectable (see injectable package insert).

EDITOR'S DESK

IF IT AIN'T BROKE

The Johns Hopkins Hospital plans to begin random drug testing on all its full and part time medical staff this summer. To say this has stirred a bit of controversy is putting it mildly; let us add to the jousting.

Other aspects of the Johns Hopkins's policy are intriguing. All other health care personnel are excluded from the new program; only physicians are targeted. The hospital presently has a program of drug testing for cause; it has been in place for several years and will continue for nonphysician people, starting in July. And, most interestingly, when one considers the individualistic personality of the average physician, it is reported that the staff has given overwhelming support to the project, even though reappointments may ride on the results.

We probably should not comment on the legality of such efforts, not having the requisite legal background or the legal research to buttress our remarks. But logic suggests at least two reasons why litigation may be minimal. First, the previous testing for cause, used for several years, probably has produced few complaints, or the new testing mechanisms probably would not have been considered. Second, those physicians who have bargained away part of their individual rights and agreed to testing also may have lost their right to legal redress, leaving a small cadre of potential troublemakers who might utilize the court system.

The ethics of mandatory drug testing have been debated for years and usually involve the principle of collisio jurium, the rights of one group as opposed to those of another. The AMA policy has been clear: it "does not support widespread random drug testing of all employees." George D. Lundberg, MD, editor of *JAMA,* once characterized such testing as "chemical McCarthyism." As might be expected, the ACLU also discusses the Hopkins's plan, feeling it suborns basic individual rights. Others with experience in drug testing also consider the plan unfortunate and ill-advised.

We have many reservations and questions about the practicality and fairness of this testing. How does one insure the accuracy of results? Who establishes the testing levels denoting impairment, considering the large number of drugs being tested, including alcohol, cocaine, heroin, common sedatives, and tranquilizers? If a physician is being treated legitimately with any of the drugs being tested, will he be excused or considered impaired? If 5 to 10 percent of people may have a problem, why do the other 90 to 95 percent have to be tested, without indication? Will a glass of wine at dinner disqualify one from acting as a physician until morning, even in an emergency? Will an oenophilic psychiatrist be exposed to the same testing and strictures as an emergency care physician? Are nonphysician personnel, such as intensive care unit nurses, IV technicians, and respiratory therapists, less hazardous to a patient's health than a nephrologist or pulmonary specialist? Should members of the board of governors, ultimately responsible for patient care, also be tested? Will this can of worms turn into a crate of rattlesnakes?

Many dangers should be recognized, even if the testing results are accurate, and if they are not------! If the testing is perceived as being unwarranted, could resentment also build against more legitimate and indicated testing? The vagaries of testing and establishing impairment parameters pose real threats to reputations and practices of staff members. Litigation from both patient and physician can be anticipated. If most of 1,500 doctors can accept this type of program, why couldn't they establish solid self-policing activities to deal with the problem of the impaired physician, rather than placing their fates in the hands of third parties?

Although Dr. Lundberg has used the term "chemical McCarthyism" in the past, his attitude may have changed and he seems able to accept this program if certain stringent criteria, such as accuracy of testing, can be assured. But he also seems to want to out-Koop Koop by asking that tobacco also be included in the test panel—a proposal that, to be kind, stretches the definition of impairment to an unacceptable degree. Dr. Lundberg was more on target when he suggested that responsible, knowledgeable representatives from medicine, government, and labor join together to determine reasonable drug testing policies in order to forestall the splinter activities of individual organizations. We agree about the need for such a joint venture.

"Lean liberty is better than fat slavery."
Thomas Fuller, MD
Gnomologia (1732)

MALIGNANT MELANOMA

Skin cancer is the most common form of cancer in the United States. One form, malignant melanoma, not only has an extremely high mortality rate, but is second only to lung cancer in its rate of increase in mortality. The article by Dr. Mertz and her colleagues, "Malignant Melanoma of the Skin" (401-407), presents a discussion of the basic descriptive epidemiology of malignant melanoma in New Jersey contrasted with concurrent national data; examines incidence and mortality among New Jersey residents; discusses risk factors; and suggests basic precautionary steps that should be included in prevention and control strategies, as the summer tanning season approaches. These steps include: avoiding peak hours of sun intensity and/or prolonged exposure to the sun; using appropriate sunscreening lotions/creams prior to (and during) anticipated sun exposure; performing skin self-examination on a regular (monthly) basis; and consulting a dermatologist for followup on any suspicious lesions or moles. ☐

BOOK REVIEWS

ACKERMAN'S SURGICAL PATHOLOGY

Juan Rosai, MD. St. Louis, MO, The C.V. Mosby Company, 1989. Since its introduction in 1953, Ackerman's textbook of surgical pathology has been a 'teething ring' and reference text for pathologists, surgeons, and other physicians. With steady and rapid increase in medical information, new editions describing these changes have been necessary. There have been many changes in the seven-year gap between this and the previous edition, including new nomenclature, diseases, and lesions, and advances in technology. The clinicopathological correlations, particularly of tumors, that made the initial edition so valuable, have been emphasized, and each section contains important information on patterns of spread and metastases, therapeutic considerations, and prognosis. The text is almost entirely the work of Dr. Rosai. Many sections have been extensively edited and some entirely have been rewritten. The chapters on liver, kidney, and bone marrow were prepared with the assistance of physicians especially knowledgeable in those subjects. The choice of collaborators was excellent, and the style is remarkably consistent from chapter to chapter.

The organization of the book is classical, with chapters related to major organ systems. The bibliography following each section is extensive, if not complete, and is representative enough to lead the reader to original publications and other authoritative sources. References as recent as 1989 are included. More than 2,000 photographs of gross and microscopic aspects of disease entities are used, and they are of uniformly excellent quality. Color reproduction will not be missed by most readers.

Several sections are directed at training pathology residents and include detailed descriptions of methods for tissue preparation. Other chapters discuss many of the newest modalities available to pathologists to delineate disease processes. These include immunohistopathological techniques and electron microscopy. A separate section, written by another associate, describes computerization of surgical pathology records. Keeping the medical community up to date in surgical pathology is no easy task, and I am happy to see this superb product of Dr. Rosai's efforts. The book is a model of clarity and terse completeness. It should gain wide acceptance by pathologists, clinicians, and medical libraries. If this all sounds like a rave review—it is. □ Marvin Shuster, MD

DENNEN'S FORCEPS DELIVERIES

Philip C. Dennen, MD. Philadelphia, PA, F.A. Davis Company, 1989. Like an old friend from residency days, this revised edition of a standard text arrived at an opportune moment in the field of obstetrics. Previous editions long since have been purloined from the medical library by eager residents desiring to improve their operative techniques.

Sadly, the legal climate has intimidated faculty from passing on their skills with forceps to the resident staff. This unfortunate trend may have reached its nadir with efforts now being made to educate patients and professionals alike as to the safety of a proper forceps delivery. The rise in cesarean section rates also has contributed to this renewed interest in operative obstetrics.

The author has updated this edition using the new American College of Obstetricians and Gynecologists (ACOG) classification of outlet, low, mid, and high forceps. The text and excellent figures clearly demonstrate the correct application of the various kinds of forceps. I have a bias against the vacuum extractor and its brief mention is not a deficiency.

This text should be in the hands of all residents. I hope they may have the satisfaction of using their training with these instruments to help a patient deliver her child in the best possible condition by the safest method. ☐ Gerard F. Hansen, MD

ENHANCED MAGNETIC RESONANCE IMAGING

Val M. Runge, MD (ed). St. Louis, MO, The C.V. Mosby Company, 1989. This highly specialized monogram addresses two technical aspects of magnetic resonance imaging (MRI), namely advancement in image quality improvement and basic and clinical application of contrast media. The book is divided into four parts, designed to help the reader through a logical sequence in understanding the rationale and principles of enhancing the image quality of MRI. Part I, "Imaging Technique," compiles five concise chapters outlining the basic principles of signal, noise, and resolution; the technical aspects of surface coils and the clinical utilization of these basics to maximize image quality. Part II, "Contrast Media Principles," deals with the physical principles of contrast enhancement in MRI as well as the pharmacologic characteristics of various paramagnetic compounds clinically available as contrast agents. Three chapters in this section deal extensively with the pharmacokinetics and toxicity of different gadolinium-based compounds. Part III, "Contrast Media-Clinical Application," deals with clinical situations in a systematic way, covering the central nervous system, spine, head and neck, cardiovascular system, mediastinum and lung, breast, liver, kidney and adrenals, pelvis, and musculoskeletal and gastrointestinal systems. Part IV, summarizes the content of the book.

The book is well written and serves both as a manual and as a reference to the radiologist who already has had experience in the evolving supraspecialty of MRI. Although the book is current in latest thoughts and development in the fast-moving MRI technology, it is doubtful that it would enjoy more than two years of shelf life before becoming obsolete. ☐ Ismail Kazem, MD

PEDIATRIC TELEPHONE MEDICINE. PRINCIPLES, TRIAGE, AND ADVICE

Jeffrey L. Brown, MD. Philadelphia, PA, J.B. Lippincott, Co., 1989. This is a useful book for a general overview of telephone advice for doctors and nurses. However, I disagree with a number of specific recommendations. For example: The section on earaches states that the child should be examined immediately if the child appears toxic. Any child with a possible ear infection should be examined the same day, whether they seem toxic or not. By 12 hours later, symptoms may be much worse. Under the heading for swimmer's ear, which cannot be diagnosed on the telephone, there is no mention of the basic treatment of eardrops containing acidic acid and alcohol. The section on gastroenteritis relies on the use of the modified WHO solution and half-strength formula for all cases. Most cases of diarrhea get better by themselves and need no treatment or change in diet. The section on fifth disease (erythema infectiosum) does not make mention of the specific virus, herpes virus 6, that can cause sudden anemia in certain susceptible persons as well as seriously compromise the fetus of a susceptible pregnant woman.

I feel this book can be recommended for use by anyone who is knowledgeable. ☐ Avrum L. Katcher, MD

LETTERS & VIEWPOINTS

ACROMEGALY

I am curious to learn why radiotherapy was planned and presumably executed in the patient described by Doctor Goldman in his paper on acromegaly (86:887-888, 1989). If a benign tumor was completely removed as indicated by Doctor Goldman, what was the purpose of radiotherapy? If a radiotherapist did radiate this patient, I am curious to know how much radiation was delivered and over how long a period of time.

I also am curious to know whether this patient fully recovered. Were there any sequelae to the radiotherapy? In short, I am interested in the details of her followup. ☐ Jerome Abrams, MD

AUTHOR RESPONSE

This letter is in response to Dr. Abrams's comments concerning the article on acromegaly (86:887-888, 1989). Transsphenoidal adenomectomy is the most efficient treatment of acromegaly.[1] External irradiation is used in those subjects not suitable for hypophysectomy or where hypophysectomy has failed to provide adequate reduction of growth hormone (GH) levels or where residual tumor has been left.[2] Recently, the criteria for optimal hormonal control of acromegaly has become more well defined realizing that levels of 10 ng/ml post-transsphenoidal resection may be two to five times over normal concentrations. In the patient described in our paper, although GH levels decreased to 10 ng/ml, the somatomedin level remained elevated at 3.2 μ/ml and the surgeon felt that additional tumor cells remained despite removal of a benign 2 cm pituitary tumor.

Radiotherapy was given to our patient: 4000 rads over 40 days. Since that time, GH levels have decreased to 8.4 ng/ml and somatomedin to 3.0 μ/ml. Menstruation has returned monthly and overall the patient feels well. Long-term followup for hypopituitarism from radiotherapy has been advised. ☐ Michael H. Goldman, MD

REFERENCES

1. Serri O, Somma M, Comotis R, et al.: Acromegaly biochemical assessment of cure after long-term followup of transsphenoidal selective adenomectomy. *J Clin Endocrinol Metab* 61:1185-1189, 1985.
2. MacLeod AF, Clarie DG, Pambakian H, et al.: Treatment of acromegaly by external irradiation. *Clin Endocrinol* 30:303-314, 1989.

PROFESSIONAL MEDICAL CONDUCT REFORM BILL

In the February 1990 issue of *NEW JERSEY MEDICINE,* under the section entitled, *Newswatch,* it was reported that S-2936 had been enacted into law. Eight gains were listed in that report. I was quite surprised by the inaccuracies in that account and I write this letter in an attempt to correct the record.

It was stated in Item 5, that a review panel, separate from the Board, will "investigate and review all but emergent disciplinary cases." That is incorrect. The review panel will make recommendations to the Board and, as we envision it, will hardly be separate from it. More importantly, the law requires reports of malpractice settlements and reports in reductions of hospital privileges to be directed to the panel in the first instance. All other reports will continue to go directly to the Board, including consumer complaints, colleague reporting, and information from police departments, all other law enforcement agencies, all courts and any other government agencies, and other sources including pharmacies. It is conceivable that the Board may direct some of these matters to the panel, but is under no requirement to do so.

Item 8 suggested that the burden of proof was elevated. The existing law really did not specify a standard of evidence and merely required proof "to the satisfaction of the Board." In fact, the Board has consistently used as its level of satisfaction the standard of "preponderance of the evidence." The standard has not at all changed and to suggest that this new law, in fact, has elevated it, is to misstate the facts.

Item 7 discussed the separation of functions for the deputy attorneys general. I am unable to find any place in the law which addresses that issue.

More disturbing is the amount of information about the new law that was not covered. I have taken the liberty of writing a report covering many of these points (see page 421). ☐ Michael B. Grossman, DO, President, State Board of Medical Examiners

MSNJ RESPONSE

I have reviewed the letter and materials of February 16, 1990, sent by Doctor Grossman, president of the State Board of Medical Examiners, regarding S-2936. I believe Doctor Grossman's article is a fair accounting of the new statute. I disagree, however, with the cover letter and particularly his discussion identified as Items 5, 7, and 8.

Items 5 and 7 are a matter involving the application of legal judgment and statutory construction. Doctor Grossman and I have differing backgrounds and consequently have used different methodologies in statutory construction, which have produced disparate opinions. The ultimate decision in this regard will be made by the courts.

His discussion regarding item 8 is partly accurate. It allowed the Board to use any standard it wishes, and that statute speaks for itself. The new statute does require "a preponderance." That clearly is an improvement, in that it is a quantifiable legal standard beyond the absolute discretion of the State Board of Medical Examiners. The fact that the Board was using the preponderance standard did not mean it could not at any time alter it to a less intensive one such as "mere scintilla." Thus, the new statute is indeed a statutory elevation. ☐ Vincent A. Maressa, Executive Director/General Counsel, Medical Society of New Jersey

LETTERS TO THE EDITOR

Letters to the editor are welcome. Communications should be sent to *NEW JERSEY MEDICINE,* MSNJ, Two Princess Road, Lawrenceville, NJ 08648. ☐

Medical Malpractice Claims in Cardiology

SUZANNE L. KUEHM, MPH
EMANUEL ABRAHAM, MD

Diagnostic errors are the leading cause of loss in cardiology liability suits. Physicians could reduce loss by ruling out conditions carrying the greatest risk if misdiagnosed and by consulting with a radiologist concerning abnormal x-rays. Lack of documentation, poor physician communication, and adverse patient perception also lead to problems.

Since its inception in 1983, the Risk Prevention Department of the Medical Inter-Insurance Exchange of New Jersey (MIIENJ), a physician-owned professional liability insurance carrier, has collected and analyzed data from its claim files in an attempt to identify specialty-specific trends in the etiology of medical malpractice suits. Two objectives of the Department are to decrease patient injury and to lower the incidence of medical malpractice suits.

Ms. Kuehm was a risk analyst with MIIENJ. Dr. Abraham is director of Ambulatory Care, Jersey Shore Medical Center and a member of the Board of Governors of the Medical Inter-Insurance Exchange of New Jersey (MIIENJ). This manuscript was submitted in October 1989 and accepted in December 1989. Requests for reprints may be addressed to Dr. Abraham, MIIENJ, Two Princess Road, Lawrenceville, NJ 08648.

A total of 115 claim files that were closed with an indemnity payment to the plaintiff were reviewed. Only those errors which represent the largest number of files and reflect a trend will be discussed. The total indemnity paid on these 115 files was $11,558,333.

ERROR IN DIAGNOSIS
(49 files—$5,897,025 indemnity paid)

The conditions in which the diagnostic error occurred, i.e. misdiagnosis, delay in making a diagnosis, or failure to diagnose, were varied, such as pulmonary embolism, aortic aneurysm, malignant neoplasm of the lung, myocardial infarction, and complications of invasive procedures. However, a failure or delay in recognizing carcinoma of the lung was the most common. In the majority of these 49 files, the error was one of omission that resulted in the patient's death. The recommendations to reduce such errors, based on these 49 files, are included in the following observations:

1. **Office radiology.** There were 13 files that revealed a failure or a delay in establishing a diagnosis of carcinoma of the lung. In 10 files, the carcinoma of the lung was visible on early chest x-rays that had been taken in the physicians' offices. Each claimant had been a patient of the physician for many years and all had routine chest x-rays taken in the physicians' offices at periodic intervals. The physicians interpreted the x-rays as "normal" or made a clinical judgment that the variant findings were of no significance resulting in a delay (up to 30 months) in recognizing the existence of the lung cancer. Frequently, the physicians stated the patients had no symptoms and they took the chest x-rays to evaluate the heart size; therefore, they were not looking for pulmonary disease.

Case example. A patient with a history of rheumatic heart disease had frequent office chest x-rays taken. The physician noted in the patient's record, "Prominent rt. hilar marking but no change in comparison with the film taken five months earlier. Feel it doesn't involve a serious problem." Four months later, a chest x-ray showed enlargement of the shadow. The physician then referred the patient to a pulmonologist who made the diagnosis of carcinoma of the lung. The delay eliminated any possible chance of survival.

Recommendation: Secure the consultation of a radiologist for x-rays taken in the office that show any deviation from normal before making a judgment that the findings are not significant. Be aware that physicians who interpret their own x-rays will be held to the standard of a radiologist.

2. **Appropriateness of diagnostic workup.** The physician/peer reviewer and/or medical defense expert cited the failure to act promptly to establish a diagnosis in the face of a life-threatening condition contributed to the patient's death. In many cases when a differential diagnosis included several conditions—one of which could be fatal if not treated immediately, e.g. pulmonary embolus—the physician first directed the treatment effort to the less serious condition such as pneumonia or emphysema. In cases involving invasive procedures, physicians often did not consider the most likely complication first, but directed initial diagnostic and treatment efforts towards less likely possible complications.

Case example. A 33-year-old woman underwent elective cardiac catheterization. Several days following the procedure, the patient complained of pain in the arm below the elbow. The physician con-

sidered inflammation or hematoma as a diagnosis and prescribed an anticoagulant and antibiotics. When no improvement occurred, the physician prescribed steroids. When the patient's fingers became cyanotic, she requested a transfer to another medical facility where her condition was diagnosed as massive thrombosis of the brachial, radial, and ulnar arteries. The final outcome was an amputation below the elbow.

Recommendation: When considering a diagnosis, first rule out the most serious condition—that which carries the greatest risk to the patient if misdiagnosed. When considering the etiology of a patient's symptoms following an invasive procedure, first consider and rule out the number one complication of that procedure.

3. Chest pain as presenting symptom. In several files, the patient was seen either in consultation in the emergency room or was an established patient seen in the office with the chief complaint of chest pain. In some cases the physician failed to evaluate blood enzymes or incorrectly interpreted an electrocardiogram (EKG). In all the cases, the patient was sent home and died within 24 hours of a massive myocardial infarction.

Case example. A 38-year-old male who had shortness of breath, left arm pain, and chest pressure intermittently over a period of one week had been treated by his family practitioner with trial doses of antacids, muscle relaxants, and anti-angina medication with some relief. At the request of the family practitioner, the patient was seen by a cardiologist in the emergency room where an EKG was interpreted as normal. The patient was discharged to his home where he died 24 hours later of a massive myocardial infarction.

Recommendation. In cardiac problems, as in other life-threatening situations, the patient's clinical history frequently is more important than reliance on a single negative test.

4. Followup. There were several cases where the physician failed to followup on a patient's complaints or failed to refer the patient for followup medical care.

Case example. A patient was seen yearly for four years following a myocardial infarction. This patient complained of "a pain in the back" on each office visit. Since the physician believed it had nothing to do with heart disease, he did not order a chest x-ray. After listening to this patient's complaint for several years, he referred the patient to a rheumatologist who ordered a chest x-ray that revealed a 15 cm aneurysm that apparently had been developing over the years. The patient had emergency surgery but died during the procedure.

Case example. The patient, a known diabetic, was admitted to the hospital from the emergency room following a head injury. No neurological consultation was requested. The patient was discharged with a prescription for Percodan® to treat his headache. The patient was given no instructions to return for an evaluation of his headache, nor was he advised to see his own physician. The insured stated he assumed the patient was under the care of a physician for the diabetes mellitus and, therefore, did not suggest any followup care. Several days later, the patient's dentist observed neurological symptoms and referred him to a neurologist who diagnosed a subdural hematoma, requiring a craniotomy.

Recommendation. Review the notations made in the patient's chart (office and hospital) during the previous visit to ensure followup on previously observed clinical findings. Instructions for followup care for patients seen in the hospital (emergency room or admitted) should be written, handed to the patient, and documented in the chart.

5. Concurrent care. When more than one physician was treating the patient concurrently, the physicians often were unclear as to whose responsibility it was to treat new evolving symptoms. As a result, neither addressed the patient's problems and the condition became worse.

Case example. Following a cardiac catheterization, a patient developed signs of infection—pain, temperature of 103°, and purulent drainage from the catheter site. The cardiologist took no action. The primary physician saw the patient daily and recorded his observations of the above symptoms in the chart, but he also took no action believing it was the responsibility of the cardiologist who performed the catheterization to order a culture and sensitivity test on the drainage. Nineteen days later, a blood culture was positive for *Staphylococcus aureus*. The patient died a few days later of overwhelming sepsis.

Recommendation. The attending physician must maintain primary responsibility for the patient even when the presenting symptoms may be a result of a procedure performed by another physician.

6. Role of consultant. Frequently, patient care was compromised because the consultant was unclear about his role and responsibility to the patient and the referring physician.

Case example. A 37-year-old woman complained of shortness of breath, a tearing sensation in her neck, and chest pain. The cardiologist requested a consultant to perform a cardiac catheterization. The consultant came into the hospital that weekend, examined the patient, and scheduled a cardiac catheterization. The consultant later stated he thought he had been called in as a "technician," i.e. to perform a procedure, and therefore he did not read the patient's chart. He further admitted that if he had read the chart he would have noted her blood pressure readings were unequal, and he would have done the complete study that same evening. His delay in performing the diagnostic study led to further delays in establishing the diagnosis of dissecting aortic aneurysm and subsequent surgery. The patient's condition deteriorated over the weekend and the patient died during emergency surgery.

Recommendation. The role of the consultant is to evaluate the patient and the data accumulated in order to render a diagnosis or an opinion and recommend further care. Communication with the referring physician, both before and after performing the consultation, is an essential element of the consultation.

7. Records. An incomplete patient record frequently led to a diagnostic error: either not enough information was recorded regarding the patient's symptoms or the physician did not elicit a complete history.

Case example. A young man alleged that his cardiologist failed to conduct a stress test and, thereby, failed to diagnose coronary artery disease. A subsequent treating cardiologist made the diagnosis ten months later. The patient stated that he told the first cardiologist he had chest pain. The record did not reflect this. It was the opinion of the peer reviewer that the history as recorded was not detailed, yet the patient had risk factors of hypertension and cigarette smoking plus symptoms of fatigue and shortness of breath when climbing stairs. The poorly documented record failed to acknowledge the patient's complaints at the time of the examination eight to ten months earlier which could have led the cardiologist to consider a stress test to rule out coronary artery disease. The diagnosis ultimately was made by another cardiologist after the patient suffered a myocardial infarction.

Recommendation. A good record reflects both the positive and negative findings of the patient's history. Document the thought process that resulted in the action taken. Consider the use of a record form such as the Problem-Oriented Medical Record (subjective, objective evaluation, assessment, and plan).

8. Office systems. There were several files where the physician failed to read an x-ray report or a copy of an emergency room record. These reports had been filed in the patient's record before the physician read them.

Recommendation. Develop an office system to ensure that you see all reports before they are filed into the patient's chart. This could be accomplished by initialing all reports after you have read them.

DECISION ERRORS
(13 files—$847,033 indemnity paid)

In this category, a review of patients' records revealed faulty decisions had been made by the patients' physicians. Obviously, the physicians involved did not know their decisions were faulty at the time. Only one file involved an error of commission. The remaining files all concerned errors of omission and delay. The following are examples of the errors in this category.

Case example. A 51-year-old patient with a history of rheumatic heart disease and mitral stenosis with atrial fibrillation was seen regularly by her cardiologist. The cardiologist was undecided about whether to prescribe anticoagulants. He requested a second opinion of another cardiologist. This consultant recommended curtailed activities, considerable bed rest, and anticoagulant therapy. The primary cardiologist disregarded this recommendation. He knew the patient had an active lifestyle and for this reason decided not to prescribe anticoagulant therapy. Before making his decision, the primary cardiologist never discussed the options and risks with the patient. Several months later, the patient died suddenly. The insured's reasoning implied (and records showed) he recognized the medical need for anticoagulant therapy. But he decided not to prescribe anticoagulant therapy for the wrong reason—the patient's active lifestyle.

Case example. A 30-year-old patient with a history of rheumatic fever with aortic and mitral stenosis complained of increasing exertional dyspnea interfering with his job. A chest x-ray showed moderate cardiac enlargement with pulmonary congestion. He was referred by his family physician to a cardiologist. The family physician accepted a 15-day wait for an appointment to the cardiologist. The cardiologist examined the patient, but did not prescribe medication for symptoms of congestive heart failure. Another 15 days later, the cardiologist scheduled a cardiac catheterization and accepted a 16-day wait. The patient died 1 day after the cardiologist had scheduled the procedure—46 days after the family physician had referred the patient to the cardiologist. In this case, both physicians exercised bad judgment in accepting the excessive delays.

Recommendation. Carefully consider the advice and directives of a specialist before deciding on a treatment plan. Schedule diagnostic tests in a timely manner, especially if the patient is at great risk of a serious or fatal outcome.

COMMUNICATION BREAKDOWN

Although there were few indemnity dollars paid in which a breakdown in communication was the primary cause, there were many files where the communication breakdown was a significant contributing factor in the patient's injury or death and the resulting suit.

1. Communication with other physicians. Communication involves consultants, the patient's prior treating physician, and other associates in the same practice. Situations where a failure to communicate contributed to or actually caused a bad result included: an attending physician failing to communicate the severity of a patient's condition to a consultant upon request for a consultation resulting in a delay in treatment and the patient's death; a physician failing to familiarize himself with the details of a patient's condition and treatment after he assumed care of this patient from another medical facility leading to a complication after surgery due to a disease the physician was not aware of and to the subsequent death of the patient; and associates in the same practice failing to communicate critical medical information to one another.

Case example. A young woman was referred to a cardiologist who made a preliminary diagnosis of dissection of the thoracic aorta (the correct diagnosis). He wrote in the patient's record, "The patient is at considerable risk." The cardiologist did not admit the patient to the hospital nor did he relay this information to his partner who was covering the practice for the weekend. There was a failure to act upon an emergent situation for 10 to 12 hours. It was the peer reviewer's opinion that this delay contributed to the patient's eventual death.

Recommendation. Direct communication in person or on the telephone with a consultant is essential, especially if you suspect a patient may be experiencing a life-threatening event. When you know a patient has been under the care of another physician, communicate directly with that physician regarding the patient's medical condition, past medical history, and current medications. Also, if possible, secure the record of the most recent hospitalization. Develop an office system that ensures all critical patient information is transmitted to covering physicians. This becomes increasingly important as the number of associates in the clinical practice increases.

2. Communication with family. There are many instances where a patient's family can help or hinder the physician in the medical treatment of the patient. It also is not uncommon that a family member institute a medical malpractice lawsuit because of a misunderstanding or a misperception of the medical treatment rendered to a relative.

Case example. A patient, treated for a leg ulcer, had elevated blood sugar. The physician prescribed insulin, but the patient's wife refused to permit its administration. The infection did not respond to the antibiotic therapy—the blood glucose gradually rose and the patient also developed septic shock. There was no attempt to explain the treatment rationale to the patient's wife. The physician gave in to the demands of the patient's family.

Recommendation. Explain to the patient's family what it is you are attempting to accomplish. Maintain objectivity; do what is right for the patient.

CARDIAC CATHETERIZATION
(9 files—$768,066 indemnity paid)

1. Risk of the procedure. There were several examples where the common complications of the procedure were not diagnosed in a timely manner and treated when they occurred, e.g. the development of an embolism or the development of an infection at the site of catheter insertion. This resulted in death, permanent disability, or prolonged hospitalization.

2. Inattention. In two instances, the physician either failed to check the intravenous setup prior to the procedure or did not notice the setup was incorrect. In one case, an air embolism resulted in the patient's death; in the other case the patient developed a hemiparesis.

3. Patient perception. There were several files where relatively minor complications appear to have been the cause of a medical malpractice suit because the patients perceived that they were being ignored or not taken seriously by their physicians.

Case example. A patient complained of a "pins-and-needles" sensation following cardiac catheterization and asked the nurse to notify the physician. The nurse responded, "Your doctor is gone for the day and cannot be reached." The comment made by the nurse may have implied to the patient that no one really cared about him and his medical condition. After a delay, the house physician checked the patient's extremity, pronounced it "O.K.," and discharged him. The following day, the patient was seen in an emergency room where he was found to have an arterial occlusion and was scheduled for an embolectomy. In this case, the patient may have perceived that his complaints were not taken seriously and this perception may have triggered the lawsuit.

Case example. Following a cardiac catheterization, a patient reported to his physician that there was bleeding from the catheterization site. The physician responded, "Don't worry, it will be alright." Two days later, the incision was still bleeding and the patient's hand and arm were swollen and painful. The patient sought treatment at an emergency room where the wound was redressed. The patient was advised to call if any additional bleeding was observed. The following day, because of continued bleeding, the wound was explored and resutured. This second physician informed the patient that the incision had been improperly sutured initially. After this, there was no further bleeding and the symptoms abated. In this example, the patient may have perceived that the first physician minimized or discredited the importance of his complaint by offering reassurances without any attempt to investigate the etiology of the bleeding. This compounded the failure to recognize the complication. It also should be recognized that the second treating physician may have induced the medical malpractice suit by his comment to the patient.

Recommendation. Showing concern for and interest in the patient's condition goes a long way in preventing a malpractice action, especially if minor complications seem to be the "cause" of the suit.

STRESS TEST

(7 files—$857,833 indemnity paid)

In all of these suits, the patients died following the stress test. Several trends appeared involving decisions and perceptions.

1. **Conduction of the test.** In six of these files, the physician was not in attendance during the test. The patient was attended by the technician who made the decision to continue or discontinue the test.

Recommendation. The decision to continue or discontinue the stress test should be based upon the physician's evaluation of the patient's complaints and the data received.

2. **Decision flaws.** In several files, a significant decision made by the physician placed the defensibility of the case, in light of the fatal outcome, in a grey area by the peer reviewer and/or the medical defense expert.

In several files, the patient's anti-angina medication was discontinued the morning of the stress test.

One patient had a Holter monitor test conducted 24 hours prior to undergoing the stress test, but the results were not available until several days after the patient had died during the stress test. The Holter monitor revealed the patient had experienced a myocardial infarction when he complained of chest pain (presumed angina) the night before the stress test.

Often the peer reviewer and/or medical defense expert expressed the opinion, "There was nothing to be gained from the stress test, and therefore the patients were deprived from living out their natural lives." Such patients either previously had diagnosed coronary artery disease (by cardiac catheterization) or had such severe claudication that their self-imposed activity would never have equalled the activity of the stress test.

Recommendations. Provide a careful explanation to family members of the rationale behind the decision to discontinue anti-angina medication before the conduction of the stress test. If such an explanation is not given, and there is a fatal outcome, the family may perceive that the decision to discontinue the anti-angina medication was an erroneous one and was the cause of the patient's death. Obtain the results of all prior tests before proceeding with additional testing if there is any possibility that these results could alter the decision to perform the additional test. Carefully consider what is to be gained from the stress test and proceed only if the result outweighs the risk involved.

3. **Family perception.** Since all of these files involved the sudden death of the patient, it appears as though anything that made the family believe that the medical professionals were unconcerned or unresponsive to the patients' plight contributed to the decision to sue.

Case example. Following a stress test, the patient was transported back to his room. Within a short period of time he complained of chest pain and shortness of breath, and was diaphoretic. The patient's wife requested assistance from the consulting cardiologist who was at the nurses' station. The cardiologist responded, "He's not my patient. Contact his attending doctor." This was verified by several persons who were present to hear the conversation. It was soon after this incident that the patient expired.

Recommendation. The perceptions that a patient's family member has of the physician is just as important as the patient's. Flippant or thoughtless remarks may come back to haunt the treating physician.

SUMMARY

In the specialty of cardiology, diagnostic error accounted for the greatest single category of loss, representing 43 percent of all files. There were a total of 13 files where there was a failure or a delay in making a diagnosis of carcinoma of the lung. In 10 of these files, the diagnostic error occurred because the physician misinterpreted a chest x-ray taken in his office. In two additional files, the diagnostic error occurred because the physician did not see the x-ray report before it was filed into the patient's chart. Peer reviewers and/or medical defense experts often cited a failure to recognize the most common complication of a procedure when it did occur and a lack of aggression in first ruling out a life-threatening condition before initiating treatment of less serious possible conditions. A breakdown in communication—physician to associate, consultant to primary physician, and physicians of different specialties treating the patient together—frequently resulted in fatal patient outcomes. And finally, but of equal importance, it appeared that perceptions by the patient and the family members regarding the quality of medical care received played an important role in the decision to sue. This especially was true when a fatal outcome occurred. ■

Malignant Melanoma of the Skin

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LAWRENCE A. MEINERT, MD, MPH

Each year, several thousand New Jersey residents are diagnosed with skin cancer, the most common form of cancer. One form of skin cancer, malignant melanoma, has a high mortality rate. This report examines melanoma rates from 1979 to 1985, and suggests basic precautionary steps necessary for prevention and control of this disease.

The incidence and mortality rates for malignant melanoma of the skin have been increasing steadily in the United States over the past several decades. The national mortality rate for melanoma of the skin rose 25.9 percent from 1973 to 1985, a greater percentage increase for any cancer except lung cancer.[1] The mortality rate for white males over the same time period increased 34.1 percent, the highest percentage increase of any cancer for this particular population.[1] The American Cancer Society estimates that the number of new cases of malignant melanoma will rise to 27,000, and that 6,000 Americans will die from the disease.[2]

Melanoma has been linked to intermittent exposure to high-intensity ultraviolet radiation.[3-5] The emphasis in this country on suntanning and outdoor recreation may account for the high rate of increase in melanoma cases. In the future, the depletion of the ozone layer, allowing for increased penetration of ultraviolet light to the earth's surface, also may contribute to an increase in the number of melanoma cases.[6,7]

New Jersey has an extensive coastline utilized for outdoor recreation and suntanning, and, thus, the state may be expected to have relatively high rates of melanoma. This is likely to be partially offset by the northern location of the state, because there is an inverse relationship between latitude and melan-

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From the New Jersey State Department of Health, Division of Epidemiology and Disease Control. This paper was submitted in January 1990 and accepted in February 1990. Requests for reprints may be addressed to Dr. Parkin, NJDOH, Division of Epidemiology and Disease Control, CN 360, Trenton, NJ 08625-0360.

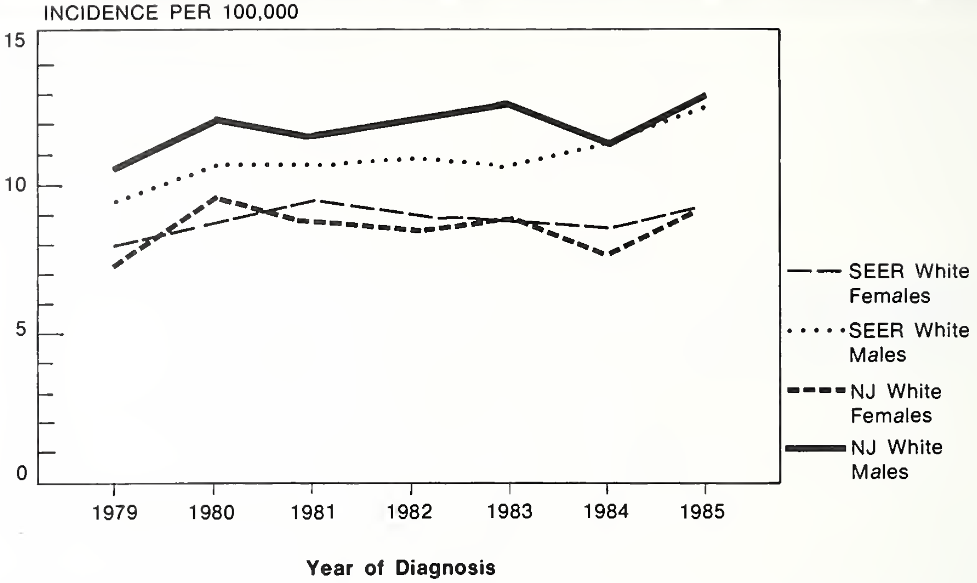

Figure 1. *Age-adjusted incidence rates for melanoma of the skin, 1979 to 1985 (adjusted to 1970 U.S. standard).*

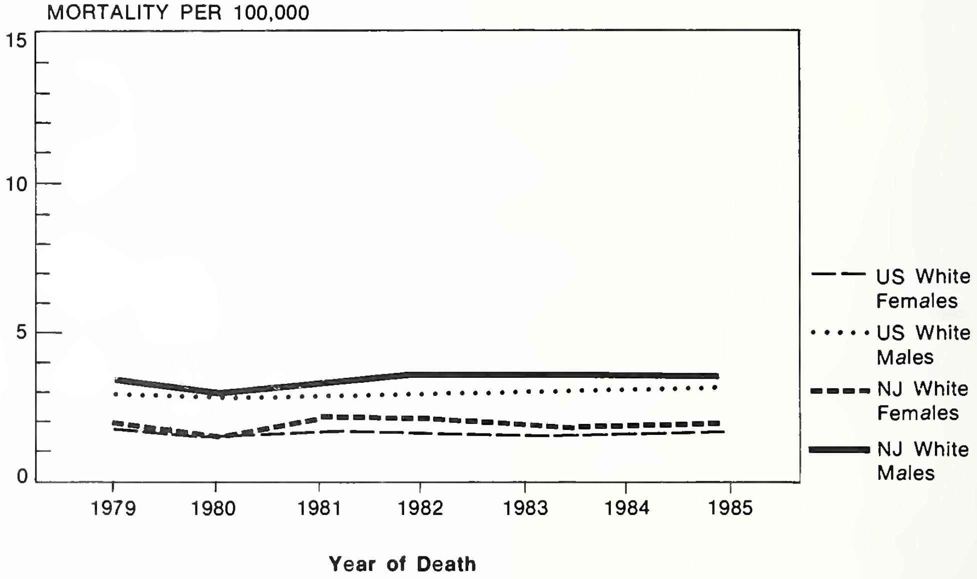

Figure 2. *Age-adjusted mortality rates for melanoma of the skin, 1979 to 1985 (adjusted to 1970 U.S. standard).*

oma incidence in whites in most parts of the world.[8,9] This report examines melanoma rates in New Jersey for the years 1979 to 1985 and compares them to concurrent national rates.

METHODS

Incidence data for malignant melanoma of the skin in New Jersey are taken from the New Jersey State Cancer Registry (NJSCR) within the New Jersey State Department of Health. NJSCR, in existence since 1979 when cancer became a reportable disease in the state, receives case reports from hospitals, laboratories, and private practitioners. The melanoma incidence data for this report exclude in situ cases and include cases identified solely by death certificate.

The mortality data for malignant melanoma in New Jersey are extracted from the state's vital statistics mortality tapes and include cases with malignant melanoma of the skin listed as the underlying cause of death.

Population estimates used to calculate incidence and mortality rates for New Jersey were supplied by the National Cancer Institute (NCI) for the years 1980 to 1985. Rates for 1979 are calculated using 1980 estimates.

National incidence and mortality rates are taken from the *Cancer Statistics Review 1973-1986,* published by NCI.[10] Information (annual average age-

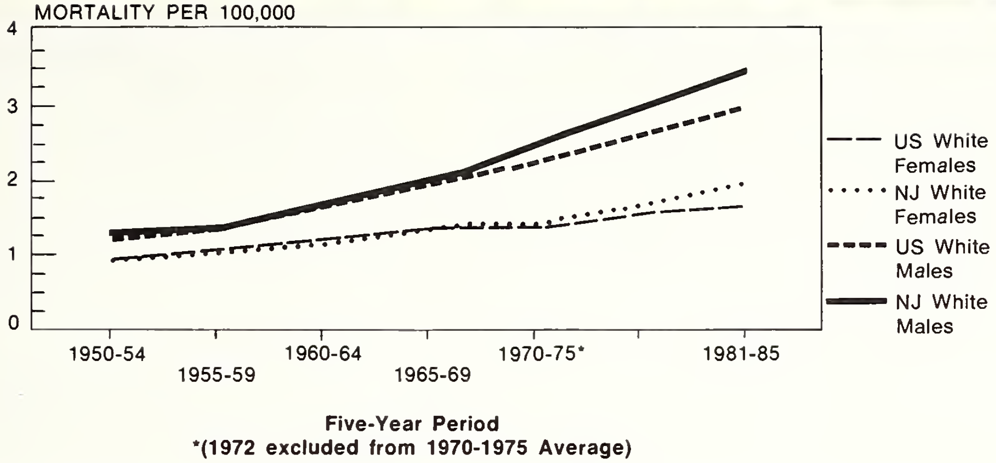

Figure 3. *Age-adjusted mortality rates for malignant melanoma of the skin (adjusted to 1960 U.S. standard).*

Table. ***Five-year average mortality per 100,000.***

	White Males			White Females		
	NJ	US	Ratio	NJ	US	Ratio
1950-1954	1.33	1.17	1.14	0.90	0.90	1.00
1955-1959	1.36	1.36	1.00	1.00	1.05	0.95
1960-1964	1.65	1.64	1.01	1.10	1.17	0.94
1965-1969	1.97	1.90	1.04	1.36	1.28	1.06
1970-1975*	2.45	2.19	1.12	1.34	1.39	0.96
1981-1985	3.45	2.94	1.17	1.96	1.63	1.20

*(1972 excluded from 1970 to 1975 average)

specific rates, staging distribution, and survival rates) for the appropriate time frames not available in this edition is taken from NCI's *1987 Annual Cancer Statistics Review.* The mortality rates cover the entire United States. The incidence rates represent cases from nine population-based registries throughout the United States that comprise the Surveillance, Epidemiology, and End Results (SEER) Program of NCI. Like the data for New Jersey, the data for the SEER Program exclude in situ cases and include cases identified by death certificate only. Of note, the four most populated counties in the state New Jersey have participated in the SEER Program since the end of 1983 but the data are not included in any of the SEER publications.

New Jersey and United States mortality rates for five-year intervals during 1950 to 1975 are taken from a table depicted in *Descriptive Epidemiology of Cancer Mortality in New Jersey: 1949-1976.*[11] These rates are age-adjusted to the 1960 U.S. standard population and, thus, cannot be assumed to be directly comparable with rates for the 1980s that are age-adjusted to the 1970 U.S. standard population. Sufficient information was available, however, to readjust the rates from 1981 to 1985 for malignant melanoma mortality in New Jersey and the United States to a common age distribution of the 1960 U.S. standard population, allowing the graphic comparison in Figures 3 and 4.

RESULTS

In New Jersey, an average of 381 males and 324 females per year were diagnosed with melanoma of the skin during the years 1979 to 1985. An average of 111 males and 79 females died each year from melanoma during the same time period.

The age-adjusted incidence rates for melanoma of the skin for white males and white females in New Jersey, 1979 to 1985, are presented in Figure 1. Melanoma incidence rates for the SEER Program for the same years are added for comparison. New Jersey white males have the highest average incidence rate for the seven-year period (11.9/100,000), followed by SEER white males at 10.9/100,000. The white female populations have lower rates at 8.8/100,000 for SEER white females and 8.5/100,000 for New Jersey white females. The incidence rates for blacks in New Jersey are very low (1.1/100,000 for black males and 1.2/100,000 for black females), and thus the analyses presented here are for the white population only.

New Jersey melanoma incidence rates consistently are higher than SEER rates for white males but not always for white females. The average New Jersey to SEER ratio over the seven-year period is 1.1 for white males and 1.0 for white females. The incidence rates for all four populations increased over the seven-year period, with the largest percentage change for SEER white males (20 percent).

The age-adjusted mortality rates for malignant melanoma of the skin in New Jersey and in the United States as a whole (1979 to 1985) are presented in Figure 2. Again, the rates for blacks are very low and are excluded from our analyses. The percent change in mortality rates over the seven-year period is highest for New Jersey white males (12.9 percent). Within the white population, the rates for males are higher than the rates for females. For both sexes the New Jersey rates are higher than the national rates and the average New Jersey to United States mortality ratio for the seven-year period is 1.2 for both white males and white females, respectively. These ratios are higher than the New Jersey to SEER incidence ratios.

In Figure 3 and the Table, average age-adjusted mortality rates for selected five-year intervals from 1950 to 1985 (excluding 1976 to 1980) are presented for both New Jersey and the United States. This clearly delineates a progressive increase in age-adjusted mortality rates over a 35-year period and indicates a possible divergence in recent years between New Jersey and national mortality rates for both males and females. Figure 4 shows the ratio of New Jersey to United States age-adjusted mortality rates for each of the intervals displayed in Figure 3. This indicates that the disparity between New Jersey and

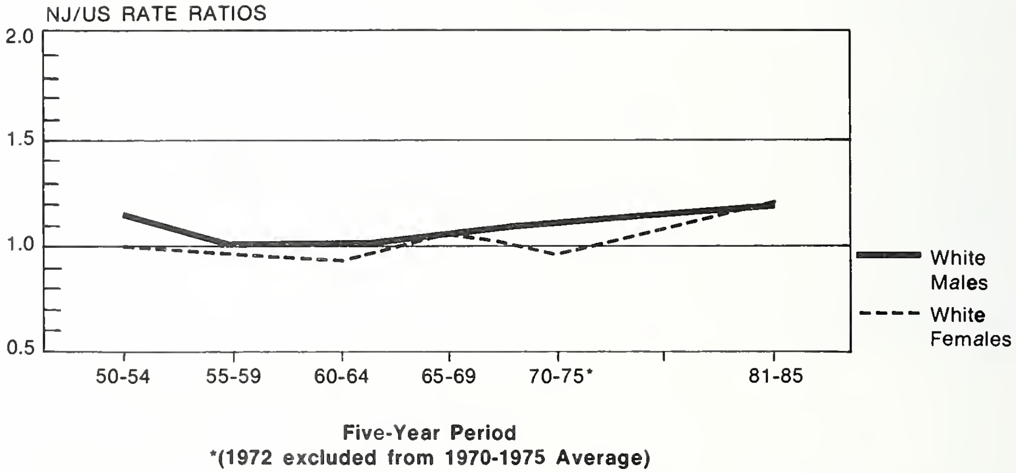

Figure 4. *Rate ratio: Malignant melanoma mortality (using rates adjusted to 1960 U.S. standard population).*

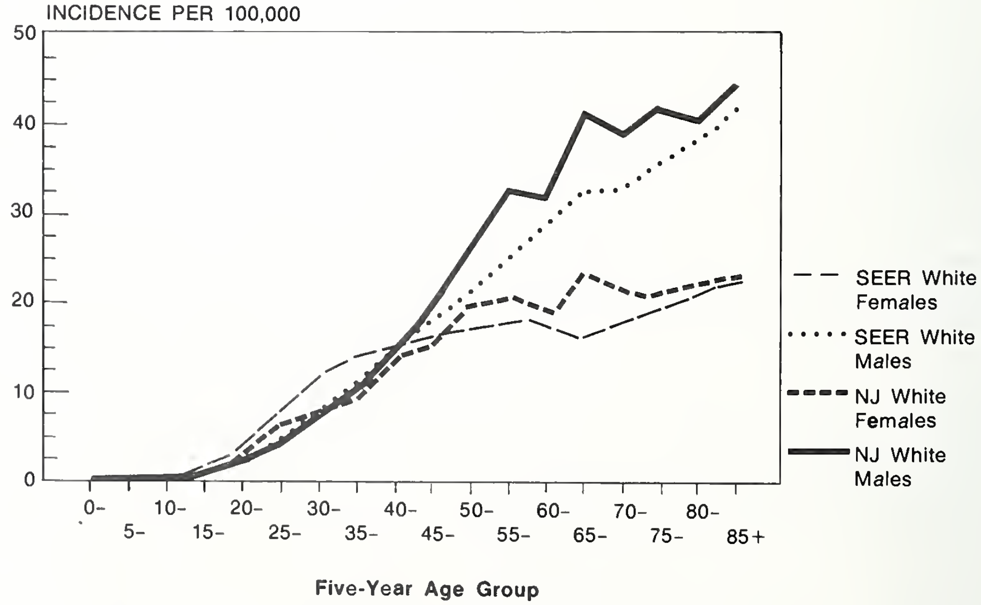

Figure 5. *Age-specific incidence rates for melanoma of the skin, 1981 to 1985.*

national melanoma mortality rates has remained fairly stable over this 35-year period.

To further compare New Jersey versus national data, melanoma rates are expressed as a percentage of total cancer rates for white males and females during the years 1979 to 1985. For white males, the average melanoma incidence rate accounts for 2.6 percent of the total cancer incidence rate in both New Jersey and the SEER Program. For white females, the average melanoma incidence rate as a percentage of the average total cancer incidence rate is greater for the SEER Program than for New Jersey (2.7 percent and 2.4 percent, respectively). Comparison of average melanoma mortality rates as a percentage of average total cancer mortality rates shows that melanoma accounts for a similar percentage of cancer deaths for both white males and white females in New Jersey as in the nation as a whole.

The average age-specific melanoma incidence rates (1981 to 1985) for white males and white females in New Jersey and in the SEER Program increase with age (Figure 5). The rate of increase in the older age groups is much higher for white males than for white females, for whom rates increase only slightly after age 50. Age-specific mortality rates for melanoma increase steadily as age increases for all four populations (Figure 6).

The five-year relative survival rates for melanoma patients are not strictly comparable for New Jersey and SEER because they cover slightly different time periods and SEER rates are not stratified by sex. New Jersey's five-year relative survival rates for white patients diagnosed with malignant melanoma at any stage of disease during the years 1979 to 1985 are 63 percent for males and 76 percent for females. These survival rates are lower than SEER's five-year relative survival rate of 80 percent for white patients diagnosed with melanoma during the years 1979 to 1984.

In New Jersey, 73 percent of melanomas diagnosed in 1979 to 1984 in white males and white females were staged as local, compared with 78 percent in the SEER Program (Figure 7). The percentage of cases staged as regional or distant was similar for New Jersey and SEER (16 percent and 14 percent, respectively).

The most common site for melanoma of the skin in the New Jersey population, 1979 to 1985, is the trunk for white males (48 percent of the cases for which site was identified) and the leg and hip for white females (38 percent of the cases for that site was identified) (Figures 8 and 9). This finding is consistent with previous reports citing the most common sites as the back for men and the lower extremity for women.[9,12]

DISCUSSION

Incidence and mortality rates for malignant melanoma of the skin are increasing in New Jersey, as they are in many places in the world. This increase in melanoma mortality is very noteworthy when age-adjusted rates are observed over the past 35-year period (1950 to 1985). This evidence reveals an increase of nearly 250 percent. Mortality rates for white males and white females are slightly higher in New Jersey than in the United States. When comparing the ratio of New Jersey to United States death rates, however, it appears that the slight disparity between New Jersey and United States mortality rates for melanoma is relatively stable over time.

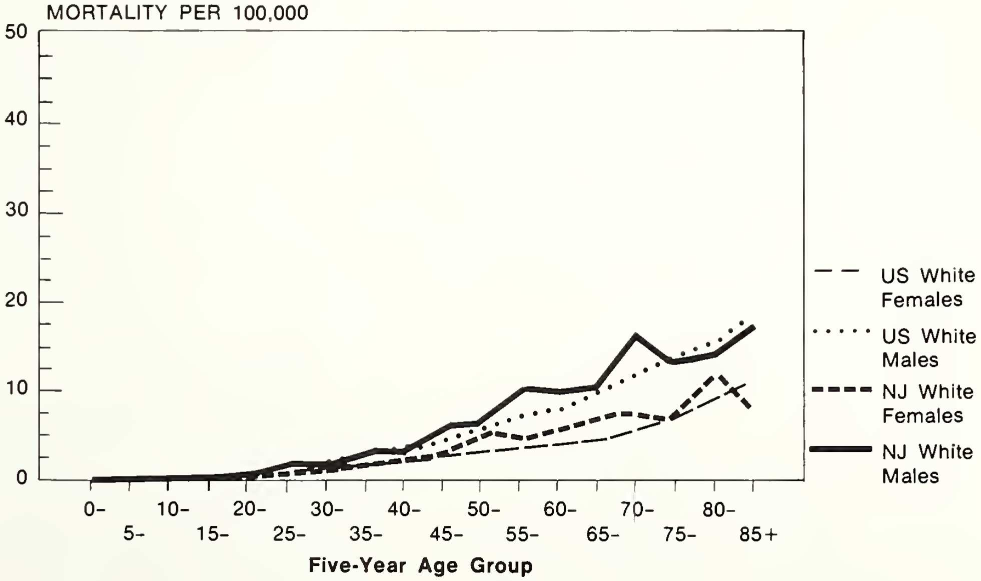

Figure 6. *Age-specific mortality rates for melanoma of the skin, 1981 to 1985.*

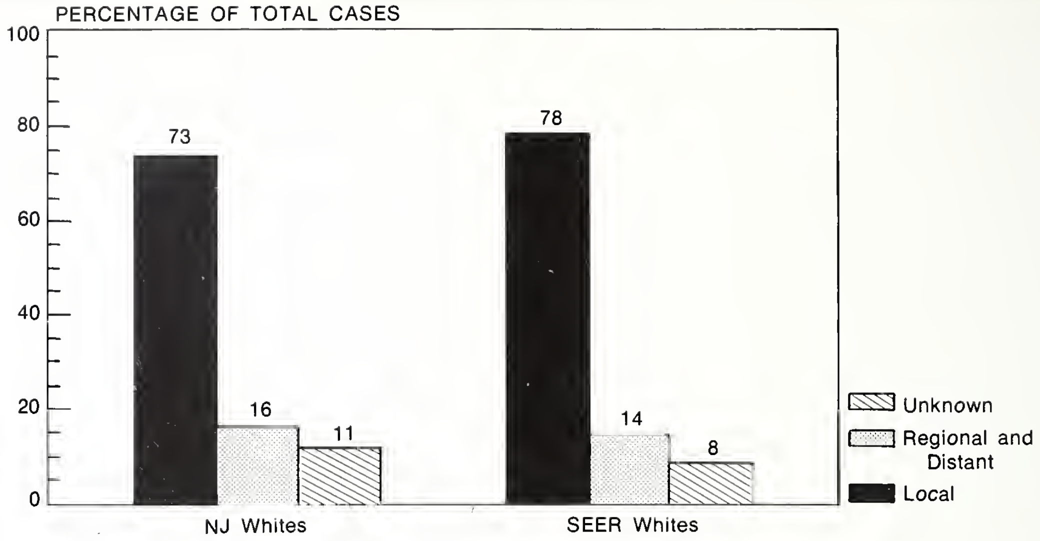

Figure 7. *Stage distribution for melanoma of skin, for male and female cases diagnosed 1979 to 1984, New Jersey versus SEER.*

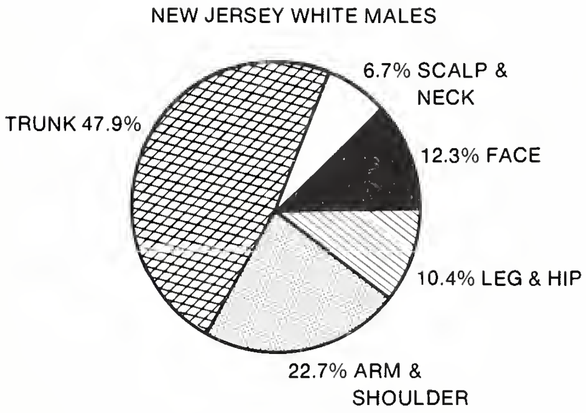

Figure 8. *Site distribution for melanoma cases of known site, diagnosed 1979 to 1985.*

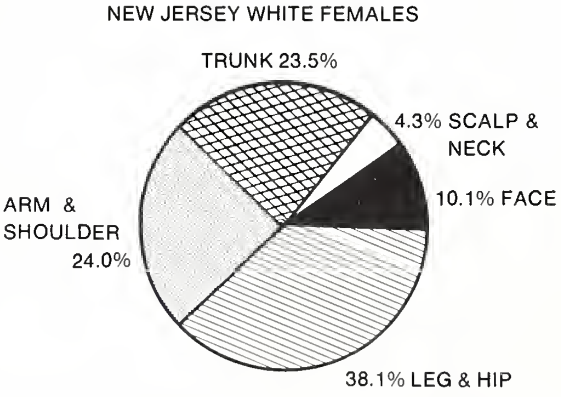

Figure 9. *Site distribution for melanoma cases of known site, diagnosed 1979 to 1985.*

The change in incidence rates for New Jersey for malignant melanoma over a 35-year period cannot be determined since incidence data were not collected prior to 1979. However, recent New Jersey data (1979 to 1985) indicate that, as with the other SEER registries, the incidence of malignant melanoma is the most rapidly rising of any cancer for white males and the second most rapidly rising (after lung cancer) for white females.

Of note, NJSCR is relatively new in comparison with many of the SEER registries, and case reporting in this state may be more limited than in the SEER Program. The sensitivity of the registry with respect to case reporting is that the total number of melanoma cases in the community being detected by the system is fairly high, though presumed to be less than 100 percent. The reason for incompleteness in reporting is due to a combination of factors including increased trends towards earlier diagnosis and treatment in private physicians' offices backed by pathological investigations by private laboratories, both of which show very poor compliance with reporting to the registry. The net result is underreporting of outpatient cases at the local stage of diagnosis. While this is a common problem shared by all registries, New Jersey faces the additional problem of unreported cases that are diagnosed and treated at private facilities in New York and Philadelphia. This potentially would lower the sensitivity of NJSCR.

NJSCR identified a greater percentage of cases solely by death certificates during its early years of existence than during its later years (15 percent versus 6 percent). As many as half of these cases identified by death certificates were diagnosed prior to 1979. This should spuriously elevate the incidence rates for melanoma during these early years (1979 to 1981) more than for later years (1982 to 1985). As a result, the "true" upward trend in cancer incidence rates may be greater than actually is presented in this report.

The causes of malignant melanoma are not well understood, though the disease has been linked to several risk factors, including intense intermittent sun exposure, indoor occupation and outdoor recreation, inability to tan, blistering sunburns in childhood, blue eyes, red or blonde hair, light complexion, history of melanoma or other skin cancer, and a large number of nevi on the skin.[13-15] There is no obvious reason why New Jersey's population should differ from the SEER population with respect to these risk factors. The nine SEER registries (Atlanta, Detroit, Seattle/Puget Sound, San Francisco-Oakland, Connecticut, Iowa, New Mexico, Utah, and Hawaii) cover a diversity of geographic areas and climates, but a majority of them either have a coastline like New Jersey or a more southern latitude than New Jersey. Thus, it is not surprising that New Jersey and the SEER Program have similar incidence rates for melanoma of the skin.

The reason for both the higher rates and the upward trend in the rates for melanoma incidence and mortality among white males as compared with white females is unclear. Are men at higher risk due to occupational exposures? Do women have less exposure to ultraviolet light, a greater tendency to use sunscreen, or some other protective factor?

One cause for concern is the apparent lower five-year survival rate for whites in New Jersey as compared with the other regions in the SEER Program. This could be a contributing factor to New Jersey's higher melanoma mortality rates. The lower survival rate may be a reflection of diagnosis at later stages of disease, because a smaller percentage of whites in New Jersey are diagnosed at a local stage compared with whites in the SEER Program. This underscores the need to strive for earlier diagnosis in New Jersey.

The age-specific incidence rates for whites indicate that melanoma is very rare for children and adolescents, but occurs much more frequently in the middle-aged and elderly populations. At present, the American Cancer Society recommends skin examinations annually for people over age 40, and every three years for those between the ages of 20 and 40.[16] The New Jersey data support the need for this guideline. A particular focus of screening activities on elderly white males may be indicated.

SUMMARY

Malignant melanoma of the skin deserves more attention from the health care community. Not only is more research needed to examine the etiological factors of malignant melanoma, but there is a need to develop a comprehensive strategy of prevention and control. Education of the public about the need to minimize exposure to ultraviolet radiation should be enhanced. This especially is important for children and adolescents because an estimated 50 percent of total lifetime sun exposure occurs by 18 years of age.[12] Education should include teaching the public the warning signs of melanoma and offering cost-effective screening services. The Dermatologic Society of New Jersey, in conjunction with the American Cancer Society, conducts free screening program at various locations around the state; such screening efforts need to be expanded into the routine practice of primary care physicians. Prevention and early detection are the most effective ways to stem the rapid rates of increase in melanoma incidence and mortality. ■

REFERENCES

1. National Institutes of Health: *Annual Cancer Statistics Review.* Bethesda, MD, National Cancer Institute, United States Department of Health and Human Services, 1988.

2. American Cancer Society: *Cancer Facts & Figures—1989.* Atlanta, GA, 1989.

3. Mackie RM: The role of sunlight in the aetiology of cutaneous malignant melanoma. *Clin Exp Dermatol* 6:407-410, 1981.

4. Armstrong BK, Holman CD: Malignant melanoma of the skin. *Bull WHO* 65:245-252, 1987.

5. Armstrong BK: Epidemiology of malignant melanoma: Intermittent or total accumulated exposure to the sun? *J Dermatol Surg Oncol* 14:835-849, 1988.

6. Jones RR: Ozone depletion and cancer risk. *Lancet* 8556:443-446, 1987.

7. Krimpke ML: Impact of ozone depletion on skin cancers. *J Dermatol Surg Oncol* 14:853-857, 1988.

8. Fears TR, et al.: Skin cancer, melanoma, and sunlight. *Am J Public Health* 66:461-464, 1976.

9. Kopf AW, et al.: Sun and malignant melanoma. *J Am Acad Dermat* 11:674-684, 1984.

10. National Institutes of Health: *Annual Cancer Statistics Review.* Bethesda, MD, National Cancer Institute, United States Department of Health and Human Services, 1989.

11. New Jersey State Department of Health, Cancer Epidemiology Program, Division of Epidemiology and Disease Control: *Descriptive Epidemiology of Cancer Mortality in New Jersey: 1949-1976.* Trenton, NJ, 1981.

12. National Institutes of Health: Sunlight, ultraviolet radiation, and the skin. Consensus development conference statement, May 1989.

13. Holman CD, Armstrong BK: Pigmentary traits, ethnic origin, benign nevi, and family history as risk factors for cutaneous malignant melanoma. *J Natl Cancer Inst* 14:397-407, 1988.

14. Evans RD, et al.: Risk factors for the development of malignant melanoma—I: Review of case-control studies. *J Am Acad Dermatol Surg Oncol* 14:397-407, 1988.

15. Kopf AW, Maize JC: Cutaneous malignant melanoma. *J Am Acad Dermatol* 16:610-613, 1987.

16. Koh HK, et al.: Screening for melanoma/skin cancer: Theoretic and practical considerations. *J Am Acad Dermatol* 20:159-172, 1989.

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References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Luetic Aortic Aneurysm

Presentation of Acute Illness

JOCK N. McCULLOUGH, MD
RONALD M. ABEL, MD

Luetic aortitis no longer is a forgotten clinical entity. A patient with an expanding aneurysm of the aortic arch required urgent surgical resection during the acute phase of the disease.

With the introduction of penicillin a generation ago, departments of "syphilology" became as extinct and arcane as techniques of cupping and bloodletting. But a recent increase in the incidence of syphilis has been noted.[1] Factors that may be contributory to this resurgence include a depressed immune response in HIV-infected individuals, and direct hematogenous inoculation among intravenous drug abusers.[2] The changes in epidemiology have rekindled a need for awareness of the protean manifestations of syphilis.

Because cardiovascular (CV) syphilis represents a tertiary stage, these lesions frequently fail to manifest until 15 to 20 years after the initial infection. Symptoms of CV syphilis can be detected in 3 to 15 percent of all untreated patients.[3-9] Older literature reported one-third of deaths due to syphilis were secondary to its cardiovascular lesions.[9]

Syphilitic aortitis, the hallmark of CV syphilis, is associated with a degeneration of the tunica media by an inflammatory mesaortitis resulting in weakening of the arterial wall and aneurysmal dilatation.[10] The majority of syphilitic aortic aneurysms involve the thoracic aorta with 63 percent in the ascending portion, and 25 percent in the transverse arch.[11]

CASE REPORT

A 37-year-old Haitian male was admitted to UMDNJ-New Jersey Medical Center with a two-week history of left arm pain, night sweats, and a ten-pound weight loss. The patient resided in the continental United States for the last seven years, was married (his wife remaining in Haiti), and denied homosexual activity or intravenous drug use. He was afebrile. Blood pressure in the right arm was 130/90. The left arm was pulseless with a barely detectable blood pressure. There were no Argyle-Robinson pupils. The trachea was deviated to the right. There was dullness to percussion in the left upper lung field and a grade 1/6 short systolic murmur was appreciated on precordial auscultation. No focal neurological deficits were present. Preliminary laboratory profile was unremarkable.

The admitting chest radiograph (Figure 1) suggested a mediastinal mass causing tracheal deviation. A computerized tomographic scan confirmed the presence of a 4.5 cm aneurysm of the aortic arch containing mural thrombus. Aortography demonstrated a fusiform-saccular dilatation of the majority

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From the Division of Cardiothoracic Surgery, Newark Beth Israel Medical Center, UMDNJ-New Jersey Medical School, Department of Surgery, where Dr. McCullough is a research fellow and Dr. Abel is a clinical professor, Section of Cardiothoracic Surgery. This manuscript was submitted in October 1989 and accepted in December 1989. Requests for reprints may be addressed to Dr. McCullough, UMDNJ-New Jersey Medical School, MSB-G506, 185 South Orange Avenue, Newark, NJ 07103.

of the thoracic aorta beginning just distal to the aortic annulus, involving the entire arch and progressing to the mid-descending thoracic aorta (Figures 2A and 2B). The left subclavian artery was occluded with retrograde filling from the left vertebral. Additional laboratory investigation revealed a positive serum VDRL and RPR. Cerebrospinal fluid obtained from lumbar puncture was reactive in both VDRL and FTA assays.

Because the underlying disease never had been treated with antibiotics, we proceeded with a ten-day course of intravenous penicillin followed by a five-week course of intramuscular penicillin, delivering a total of 20,000,000 units. During this time, the patient remained hospitalized, and continued to complain of severe interscapular back pain relieved only partially by leaning forward.

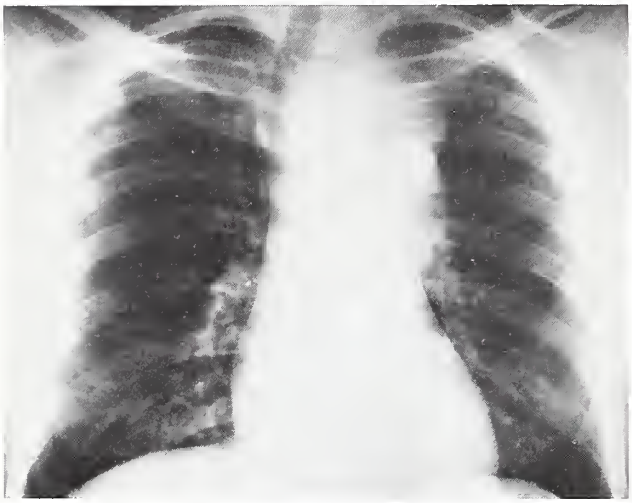


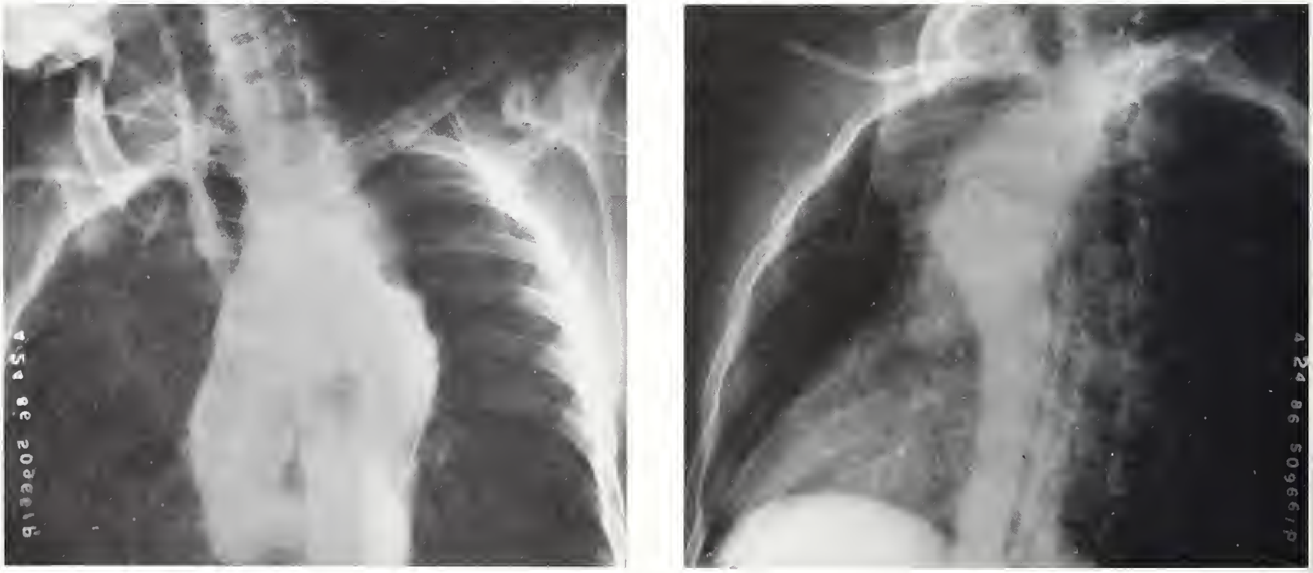
Figure 1. Admitting chest radiograph with superior mediastinal mass resulting in displacement of the trachea to the right.

Following his course of antibiotics, the patient was taken to the operating room for resection of the aneurysm. Via a bilateral anterior thoracotomy incision, total cardiopulmonary bypass was instituted using left femoral and right atrial cannulation. At 19°C, a 34-minute period of circulatory arrest was required to perform a distal anastomosis in the middle of the descending thoracic aorta with a 34 mm woven low porosity Dacron® graft that previously had been autoclaved with 5 percent albumin solution. The left common carotid and innominate arteries were attached to the graft as a "cuff." The chronically thrombosed left subclavian artery was not grafted. The proximal anastomosis then was completed approximately 3 cm distal to the plane of the aortic valve where the remaining aorta appeared grossly normal.

The postoperative course was entirely uneventful. After three years, the patient has remained asymptomatic.

DISCUSSION

Despite the "magic bullet" of antibiotics, syphilis still was listed as the third most commonly reported communicable disease as late as 1980.[12] Less than 20 percent of syphilitic aortic aneurysms are assigned an accurate clinical diagnosis prior to autopsy.[4,6,13] Because a significant portion of the population continues to contract syphilis, and because CV syphilis often defies antemortem diagnosis, the possibility of syphilitic thoracic aneurysm must be borne in mind during the evaluation of any anterior superior mediastinal mass.[5] The danger of delaying this diagnosis was illustrated in a report of a presumably malignant noncalcified anterior mediastinal mass presenting with the superior vena caval syndrome.



Figures 2A and 2B. Aortograms showing a large thoracic aneurysm beginning just above the aortic annulus and involving the majority of the thoracic aorta.

The patient was treated emergently with radiotherapy and corticosteroids but succumbed within days of his admission. At autopsy, a syphilitic aneurysm of his ascending aorta was found.[3]

The diagnosis of syphilitic aortitis is difficult and only will be made if the possibility is considered. Symptoms may include dysphagia, dyspnea, superior vena caval syndrome, or hoarseness secondary to impingement of the recurrent laryngeal nerve.[9] Positive serological testing supports the diagnosis, but 15 to 30 percent of patients with syphilitic aortitis will have negative serology.[13] Aortic regurgitation may be present but aneurysm now has replaced aortic insufficiency as the major complication of syphilitic aortitis.[13]

In our patient, several controversial issues arose as a treatment plan was devised. The delivery of adequate preoperative antibiotic therapy to an actively infected patient requiring the placement of a cardiovascular prosthesis was a paramount concern. The current United States Public Health Service guidelines for the antibiotic treatment of late CV or neurosyphilis are benzathine penicillin (PCN) intramuscularly for three weeks delivering a total dose of 7.2 x 10^6 units or aqueous procaine PCN intramuscularly for 15 days (9 x 10^6 units total dose).[8] Persistent treponemas, however, have been noted in arterial walls despite receipt of the recommended therapy.[8] In light of this, we chose a five-week preoperative antibiotic regimen in an attempt to sterilize the residual aorta. At least one case of acute rupture of a syphilitic aneurysm attributed to a Jarisch-Herxheimer reaction 19 hours following the patient's first dose of PCN has been reported,[14] but this is a very rare occurrence and should not temper the use of vigorous preoperative antibiotic therapy. There also are reports of patients who, because of inaccurate preoperative diagnosis, received either no antibiotic therapy, or postoperative therapy only. There were not any unusual infectious complications reported in these patients.[15]

The indications for surgical resection in this patient included evidence of compression of adjacent mediastinal structures, and the imminent risk of aneurysm rupture given the patient's continued pain suggesting unattenuated expansion. The technical advances afforded by the technique of total circulatory arrest enabled a one-stage resection of this extensive aneurysm.[16,18]

Finally, the possibility of a syphilitic aortic aneurysm should be considered during the evaluation of superior mediastinal masses. Since the signs and symptoms are protean, and laboratory evidence merely confirmatory, only a high index of suspicion can lead to a proper diagnosis. Operative intervention should not be delayed since the natural history usually includes lethal rupture six to eight months following the onset of symptoms.[9] Because controlled studies indicating an ideal perioperative antibiotic program have not been conducted, it appears reasonable to employ a conservative regimen similar to that reported here in order to provide adequate spirocheticidal effect prior to placement of a prosthetic graft. ■

REFERENCES

1. Centers for Disease Control: Continuing increase in infectious syphilis-United States. Leads from the MMWR. *JAMA* 259:975-977, 1988.
2. Centers for Disease Control: Relationship of syphilis to drug use and prostitution—Connecticut and Philadelphia, Pennsylvania. *Arch Dermatol* 125:169-170, 1989.
3. Phillips PL, Amberson JB, Libby DM: Syphilitic aortic aneurysm presenting with the superior vena cava syndrome. *Am J Med* 71:171-173, 1981.
4. Boharas S, Hollander L, Goldsmith M: The early diagnosis of syphilitic aortitis. *Am J Med Sci* 203:54-64, 1942.
5. Welty JW: A necropsy survey of cardiovascular syphilis with particular reference to its decreasing incidence. *Am J Med Sci* 197:782-793, 1939.
6. Maynard EP: The present status of the diagnosis of uncomplicated syphilitic aortitis. *Bull NY Acad Med* 18:383-391, 1942.
7. Martland HAS: Symposium on cardiovascular syphilis. *Am Heart J* 6(1):1-29, 1930.
8. Hoeprich PD (Ed.): *Infectious Diseases—A Modern Treatise of Infectious Processes.* New York, NY, Harper and Row, 1977, pp. 517-535.
9. Lande A, Berkmen YA: Aortitis-pathologic, clinical, and arteriographic review. *Radiol Clin North Am* 14:219-240, 1976.
10. Cotran RS, Kumar V, Robbins SL (eds): *Robbins Pathologic Basis of Disease.* Philadelphia, PA, W.B. Saunders Company, 1989, pp. 368-371, 580-582.
11. Tadavarthy SM, Castaneda-Zuniga WR, Klugman J, et al.: Syphilitic aneurysms of the innominate artery. *Radiology* 139:31-34, 1981.
12. Davis BD, Dulbecco R, Eisen HN, Ginsberg HS (eds): *Microbiology.* Philadelphia, PA, Harper and Row, 1980, pp. 752-758.
13. Heggtveit AH: Syphilitic aortitis—a clinicopathologic autopsy study of 100 cases 1950-1960. *Circulation* 29:346-355, 1964.
14. Hughes GR: Jarisch-Herxheimer reaction and syphilitic aortitis. *Med J* 1:360, 1968.
15. DuToit DF, McCormich M, Laker L: Syphilitic aortitis—a case report. *S Afr Med* J 67:778-779, 1985.
16. Crepps JT, Allmendindger P, Ellison L, et al.: Hypothermic circulatory arrest in the treatment of thoracic aortic lesions. *Ann Thorac Surg* 43:644-647, 1987.
17. Crawford SE, Saleh SA: Transverse aortic arch aneurysm-improved results of treatment employing new modifications of aortic reconstruction and hypothermic cerebral circulatory arrest. *Ann Surg* 194(2):180-188, 1981.
18. Kazui T, Inoue N, Komatsu S: Surgical treatment of aneurysms of the transverse aortic arch. *J Cardiovasc Surg* 30:402-406, 1989.

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Tuberculosis, AIDS, and IV Drug Abuse

R.J. LAMB, PhD
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The number of tuberculosis cases reported has begun to rise. This rise in the number of cases may be due to HIV infection, particularly among intravenous drug abusers.

Human immunodeficiency virus (HIV) infection is an increasing public health problem. In New Jersey, intravenous drug users (IVDUs) are at high risk for HIV infection. This group accounts for about half of the acquired immunodeficiency syndrome (AIDS) cases in New Jersey.[1] The prevalence of HIV infection approaches or exceeds half in IVDUs in some urban areas of northern New Jersey; in other parts of the state the prevalence of HIV infection is lower, but not insignificant. These individuals are at increased risk for opportunistic infections, including not only atypical (nontuberculous) mycobacterial infections, but also *Mycobacterium tuberculosis* infections.[2] Tuberculosis among this group of individuals is thought to be largely responsible for the reversal of the decades-long decline in the prevalence of tuberculosis in the United States.[3] Because of the likelihood that tuberculosis will become an increasing public health problem in New Jersey due to HIV infection, particularly among IVDUs, current literature on tuberculosis in HIV-infected individuals and IVDUs is reviewed.

Infection (clinically inactive) with *M. tuberculosis* can cause a necrotizing disease (tuberculosis disease—active). Tuberculosis disease most often affects the lungs, but lesions may occur in other organs and may be disseminated throughout the body. Disease can occur shortly after infection (primary tuberculosis) or after a longer period of dormancy (reactivation disease). The prevalence of tuberculosis infection, as indicated by a positive tuberculin skin test, is 7 to 8 percent nationwide, but can range up to 20 to 30 percent in some localities. Of those infected, 8 to 20 percent will develop tuberculosis disease. Progression from infection to disease generally is prevented by a T-cell mediated immunological response. This T-cell mediated immunity is responsible for the positive tuberculin skin test seen in individuals with tuberculosis infection.

The prevalence of tuberculosis infection among IVDUs is similar to the local rate of infection.[4,5] However, IVDUs are at an increased risk for the development of tuberculosis disease.[5] Further, the prevalence of tuberculosis infection is similar in IVDUs with HIV infection and in those without, but IVDUs with both HIV and tuberculosis infections are at increased risk for the development of tuberculosis disease as compared to IVDUs with only tuberculosis infection.[6] Finally, AIDS and AIDS-Related Complex (ARC) patients who are IVDUs are more likely to have tuberculosis disease than AIDS/ARC patients who are not IVDUs.[7,8] Therefore, because of their increased risk of progressing from tuberculosis

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infection to disease, IVDUs should be screened for tuberculosis infection and disease.

Several lines of evidence link HIV infection and the rising prevalence of tuberculosis: since T-cell mediated immunity is responsible for preventing the progression from tuberculosis infection to disease, anything that decreases T-cell mediated immunity should increase the risk of tuberculosis disease; there is geographic overlap between areas of rising tuberculosis and areas with a high prevalence of AIDS, and further, higher-than-expected overlap is found between registers of AIDS patients and tuberculosis patients;[9-12] patients with AIDS have a higher prevalence of tuberculosis than the general population,[2,8,13] and patients with tuberculosis have a higher prevalence of AIDS and HIV infection than the general population;[14] and in a prospective study of tuberculosis infected individuals, those with concomitant HIV infection were more likely to develop tuberculosis disease than those without concomitant HIV infection.[6] Interestingly, studies examining the overlap between the tuberculosis registers and the AIDS registers indicate that AIDS patients who abuse intravenous drugs or are Haitian are more likely to have tuberculosis disease than members of other AIDS-risk groups.[10,11,12,15] This finding may relate to the lower socioeconomic status, poorer nutritional status, and higher prevalence of tuberculosis infection compared to other AIDS risk groups.

Guidelines for tuberculosis screening have been developed by the American Thoracic Society and the Centers for Disease Control, which include the recommendation for screening of groups with a disease rate in excess of the general U.S. population.[16] IVDUs clearly are included in this recommendation. An initial screen generally consists of a tuberculin skin test, but should include a chest x-ray in patients with high-risk medical conditions, such as AIDS patients, because of the high incidence of false negative skin test results. For instance, in one study, 27 percent of the HIV seropositive individuals enrolled in a methadone maintenance program were anergic;[6] in a second study, only 2 of 29 patients with both tuberculosis and AIDS had a positive tuberculin skin test;[8] finally, in a third study only 50 percent of the patients with HIV infection and tuberculosis disease had a positive tuberculin skin test.[14] Thus, anergy testing may be of value in tuberculosis screening of IVDUs and other individuals at risk for HIV infection.

Tuberculosis disease frequently has an atypical presentation in HIV-infected individuals; for instance, extrapulmonary tuberculosis disease is much more common.[7,8,14] Because of the atypical presentation in HIV-infected individuals, a high index of suspicion must be present for the diagnosis of tuberculosis to be made. Definitive confirmation of the diagnosis is made by the culture of *M. tuberculosis* from body fluids or tissues, that may require numerous attempts. Appropriate specimens include sputum, blood, urine, bone marrow, and lymph nodes, as well as any other clinically suspicious body fluid or tissue.

Conversely, the presence of tuberculosis disease, particularly if extrapulmonary, may indicate HIV infection; this especially is the case for HIV infection risk groups. Tuberculosis disease often presents before other opportunistic infections in HIV-infected individuals.[8,13,14,17] Also, because of their increased risk for developing tuberculosis disease, individuals with HIV infection and tuberculosis infection should receive prophylactic treatment with isoniazid.[18,19]

Guidelines for the prophylactic treatment of tuberculosis infection in order to prevent the development of tuberculosis disease have been developed by the American Thoracic Society and the Centers for Disease Control,[18,20] and by the Committee on Isoniazid Preventive Treatment.[21] The latter specifies that heroin addicts with positive tuberculin skin tests should receive prophylactic treatment. The typical prophylactic treatment is isoniazid, 300 mg per day, for one year, unless infection with isoniazid resistant organisms is suspected. When isoniazid is used, pyridoxine also should be given, and monthly clinical evaluations of the possibility of liver toxicity made; in patients at high risk for liver toxicity, appropriate laboratory testing should be done. Since compliance is the major factor in unsuccessful prophylactic treatment of tuberculosis, consideration should be given to administering prophylactic treatment to appropriate individuals in the drug abuse treatment setting when attendance is daily and long term, e.g. methadone maintenance clients. The Committee on Isoniazid Preventive Treatment lists six factors that should be considered before initiating isoniazid prophylactic treatment: (1) exclude the presence of tuberculosis disease; (2) exclude individuals with prior adequate prophylactic therapy; (3) exclude or exercise caution with individuals with prior adverse reactions to isoniazid; (4) defer therapy of those with unstable hepatic function; (5) consider interactions with other drugs or hepatotoxic agents; and (6) if possible, defer treatment of pregnant women.[21]

Guidelines for the treatment of tuberculosis disease have been developed by the American Thoracic Society and the Centers for Disease Control.[18-20] Suggestions of high failure rates in AIDS patients treated by a standard six-month regimen[22] have led to a recommendation for a minimum of nine months of therapy using at least three active drugs, continuing at least six months after the patient becomes culture negative for *M. tuberculosis*.[18,19]

One should note that rifampin accelerates the metabolism of many drugs including oral contraceptives[23] and methadone,[24] decreasing the effectiveness of these drugs. These interactions do not contraindicate the use of rifampin, but patients being treated with rifampin should be made aware of these interactions. Patients at risk for HIV infection or with HIV infection should be counseled about the desirability of using condoms as a means of birth control, in any case. Furthermore, patients who are IVDUs and who are not in drug abuse treatment should be encouraged to enter a treatment program as soon as possible.

SUMMARY

Human immunodeficiency virus (HIV) infection does not place individuals at risk for tuberculosis infection, but rather places individuals with tuberculosis infection at increased risk for the development of tuberculosis disease. Likewise, illicit intravenous drug use places individuals with tuberculosis infection at increased risk for tuberculosis disease, and intravenous drug users (IVDUs) who also are HIV-infected are at further increased risk. In areas or groups with high rates of tuberculosis infection, individuals at high risk for HIV infection are candidates for tuberculosis screening and prophylactic treatment with isoniazid. Because the users of illicit intravenous drugs frequently come from communities with a high prevalence of tuberculosis infection and are at high risk for HIV infection in New Jersey, IVDUs and former IVDUs should be screened for tuberculosis infection, and if indicated (and not contraindicated), should receive prophylactic treatment with isoniazid.

In patients presenting with extrapulmonary tuberculosis disease, the possibility that this disease is an early manifestation of HIV infection should be considered. ■

REFERENCES

1. New Jersey Department of Health: AIDS cases, State of New Jersey as of August 31, 1989.
2. Selik RM, Starcher ET, Curran JW: Opportunistic diseases reported in AIDS patients: Frequencies, associations, and trends. *AIDS* 1:175-182, 1987.
3. Centers for Disease Control: Tuberculosis—United States, 1985—and the possible impact of human T-lymphotropic virus type III/lymphadenopathy-associated virus infection. *MMWR* 35:74-6, 1986.
4. Friedman LN, Sulivan GM, Bevilaqua RP, Loscos R: Tuberculosis screening in alcoholics and drug addicts. *Am Rev Respir Dis* 136:1168-1192, 1987.
5. Reichman LB, Felton CP, Edsall JR: Drug dependence, a possible new risk factor for tuberculosis disease. *Arch Intern Med* 139:337-339, 1979.
6. Selwyn PA, Hartel D, Lewis VA, et al.: A prospective study of the risk of tuberculosis among intravenous drug users with human immunodeficiency virus infection. *N Engl J Med* 320:545-550, 1989.
7. Handwerger S, Mildvan D, Senie R, McKinley FW: Tuberculosis and the acquired immunodeficiency syndrome at a New York City hospital: 1978-1985. *Chest* 91:176-180, 1987.
8. Sunderman G, McDonald RJ, Maniatis T, et al.: Tuberculosis as a manifestation of the acquired immunodeficiency syndrome (AIDS). *JAMA* 256:362-366, 1986.
9. Cole CH, Witte JJ, Bigler WJ, et al.: Tuberculosis and acquired immunodeficiency syndrome—Florida. *MMWR* 35:587-589, 1986.
10. Stoneburner RL, Milberg JA, Schultz S, et al.: Tuberculosis and acquired immunodeficiency syndrome—New York City. *MMWR* 36:785-787, 1987.
11. Hadler JL, Burger R: Tuberculosis and AIDS—Connecticut. *MMWR* 36:133-136, 1987.
12. Chaisson RE, Schecter GF, Theuer CP, et al.: Tuberculosis in patients with the acquired immunodeficiency syndrome: Clinical features, responses to therapy, and survival. *Am Rev Respir Dis* 136:570-574, 1987.
13. Maayan S, Wormser GP, Hewlett D, et al.: Acquired immunodeficiency syndrome (AIDS) in an economically disadvantaged population. *Arch Intern Med* 145:1607-1612, 1985.
14. Pitchenik AE, Burr J, Suarez M, et al.: Human T-cell lymphotropic virus-III (HTLV-III) seropositivity and related disease among 71 consecutive patients in whom tuberculosis was diagnosed. *Am Rev Respir Dis* 135:875-879, 1987.
15. Pitchenik AE, Cole C, Russel BW, et al.: Tuberculosis, atypical mycobacteriosis, and the acquired immunodeficiency syndrome among Haitian and non-Haitian patients in South Florida. *Ann Intern Med* 101:641-645, 1984.
16. American Thoracic Society and the Centers for Disease Control: Control of tuberculosis. *Am Rev Respir Dis* 128:336-342, 1983.
17. Louie E, Rice LB, Holzman RS: Tuberculosis in non-Haitian patients with acquired immunodeficiency syndrome. *Chest* 90:542-545, 1986.
18. American Thoracic Society and the Centers for Disease Control: Mycobacterioses and the acquired immunodeficiency syndrome. *Am Rev Respir Dis* 136:492-496, 1987.
19. Centers for Disease Control: Diagnosis and management of mycobacterial infection and disease in persons with human immunodeficiency virus infection. *Ann Intern Med* 106:254-256, 1987.
20. American Thoracic Society and the Centers for Disease Control: Treatment of tuberculosis and tuberculosis infection in adults and children. *Am Rev Respir Dis* 134:355-363, 1986.
21. Committee on Isoniazid Preventive Treatment: Preventive treatment of tuberculosis. *Chest* 87(2) suppl. 128S-132S, 1985.
22. Sunderam G, Mangura BT, Lombardo JM, Reichman LB: Failure of "optimal" four-drug short-course tuberculosis chemotherapy in a compliant patient with human immunodeficiency virus. *Am Rev Respir Dis* 136:1475-1478, 1987.
23. Skolnick JL, Stoler BS, Katz DB, Anderson WH: Rifampin, oral contraceptives, and pregnancy. *JAMA* 236:1382, 1976.
24. Kreek MJ, Garfield JW, Gutjahr CL, Giusti LM: Rifampin-induced methadone withdrawal. *N Engl J Med* 294:1104-1106, 1976.

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Minority Health Status in New Jersey

GEORGE HAMPTON
DOUGLAS H. MORGAN
BILLIE SLAUGHTER, PhD

The health status of minorities in New Jersey, like that of the nation, continues to lag far behind that of whites. In an effort to address this problem, UMDNJ has established a Minority Health Institute to focus the resources of the state's academic health science center on the problem.

Health care delivery, financing, and effectiveness for the urban poor and minorities are becoming critical issues in the social and economic realities of today. The need for well-informed advocacy with respect to health trends and practices that affect these populations never has been greater. The University of Medicine and Dentistry of New Jersey (UMDNJ), through its Minority Health Institute and Task Force, has addressed these critical concerns, and it seeks to promote programs that assist in reducing the high morbidity and mortality among the urban poor and minorities.

Recent studies have demonstrated the critical importance of, and urgency for, immediate action directed at reducing the marked disparities that exist between the health profiles of America's minority and non-minority populations. In the 1985 *Report of the Secretary's Task Force on Black and Minority Health,* excess deaths were cited as the primary cause of the health profile disparity.[1] "Excess deaths" is defined as the difference in those deaths observed in the minority populations and the number of deaths that would have been expected in the minority population if they had the same age and sex-specific death rate as the non-minority population.[1] Nationally, black and other minority populations experience almost 60,000 excess deaths per year.[1] Cancer, cardiovascular disease and stroke, cirrhosis, diabetes, homicides and accidents, and infant mortality have been identified as the direct contributors to the high mortality rate in these populations (Table).[1]

The secretary's report provides detailed information for each of the contributors on the poor health status of minorities. For example, blacks have twice the rate of infant mortality as whites, a rate equal to or greater than the infant mortality rate of many underdeveloped third-world nations.[1] Over the last 25 years, cancer mortality rates for blacks increased by 26 percent while the increase for whites has been only 5 percent.[2] The death rate from lung cancer is 45 percent higher among black males than

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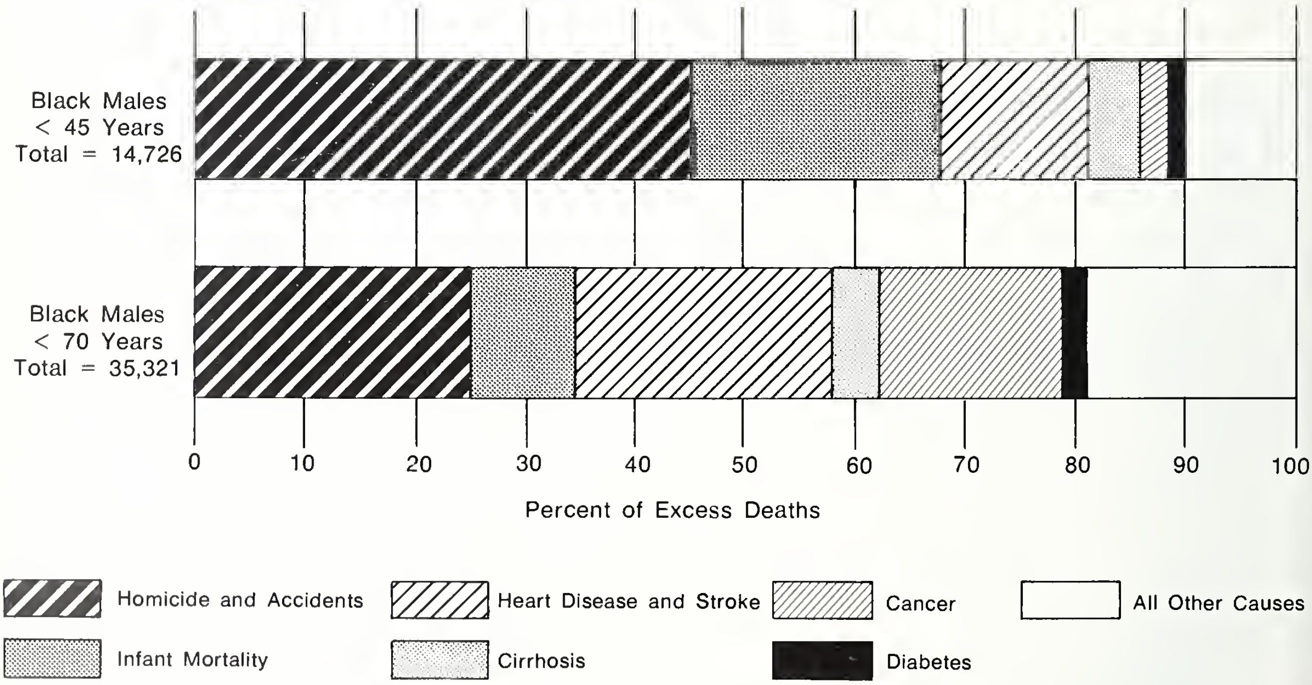
white males. Homicide accounts for excess mortality among blacks under the age of 45—more than any other cause except infant mortality and heart disease (Figure 1).[2] Over a lifetime, it is projected that 1 out of 21 black males will become a homicide victim, compared to 1 out of 131 white males (Figure 2).[3] A more recent report, *Health United States 1988,* released by the National Center for Health Statistics of the United States Department of Health and Human Services, indicated that white Americans enjoy increased life expectancy resulting from declining mortality and morbidity from major illness. In contrast, black Americans are experiencing a decrease in life expectancy, due in part to the increasing incidence of AIDS and homicides in the black community.[4] The health status of racial minorities and the poor in New Jersey is similar to that across the nation. The leading causes of death among blacks in New Jersey in 1987 were heart disease, cancer, infectious parasitic diseases, cerebrovascular disease, AIDS, and accidents.[5] The incidence of AIDS in the state, however, differs dramatically from national trends. Although New Jersey ranks fourth in the nation in the number of reported AIDS cases, 55 percent of New Jersey's cases are linked to intravenous drug abuse (IVDA) as the source of infection.[6] Nationally, IVDA accounts for only 20 percent of AIDS cases. Also, New Jersey has the highest percentage of women with the HIV infection and ranks third in the nation in the number of pediatric AIDS cases.[6] Fifty-six percent of New Jersey's cases occur in blacks and Hispanics.[6]

Recent information compiled by New Jersey's State Department of Health is consistent with the earlier findings of the Secretary's Task Force, namely that minorities in New Jersey experience higher rates of mortality and morbidity than do whites.[7] The report, *Health Profile: Black and Minority Populations in New Jersey,* issued by the New Jersey State Department of Health, reveals the magnitude of the health problems facing minorities in New Jersey.[7] Highlights of the report indicate the following:

The incidence of very low birth weight for whites is 9.4 births per 1,000 in comparison to 27.5 births per 1,000 for blacks. Risk of very low birth weight (less than 1500 gm) is 2.9 times higher for black infants than for white infants.

AIDS deaths among black infants are 14 times greater than AIDS deaths among white infants. Syphilis rates among black adults are 25 to 30 times greater than syphilis death rates of white adults. Homicide death rates among black adults are almost four times greater than homicide death rates for white adults. Esophageal cancer death rates among black males are three times greater than esophageal cancer death rates for white males. Chemical poison-



*The base of "zero" is equal to the mortality rate for whites. "Excess deaths" indicate those observed in excess of whites.

Report of the Secretary's Task Force on Black and Minority Health. United States Department of Health and Human Services, Volume 1. Executive Summary, page 72, 1985.

Figure 1. ***Average annual excess deaths for black males, 1979-1981.****

ings among the employed black population are three times greater than chemical poisonings for the employed white population. Cardiovascular mortality rates, based on a three-year average, are higher for nonwhite males than white males of age 45 to 64, and higher for nonwhite females than white females of the same age group.

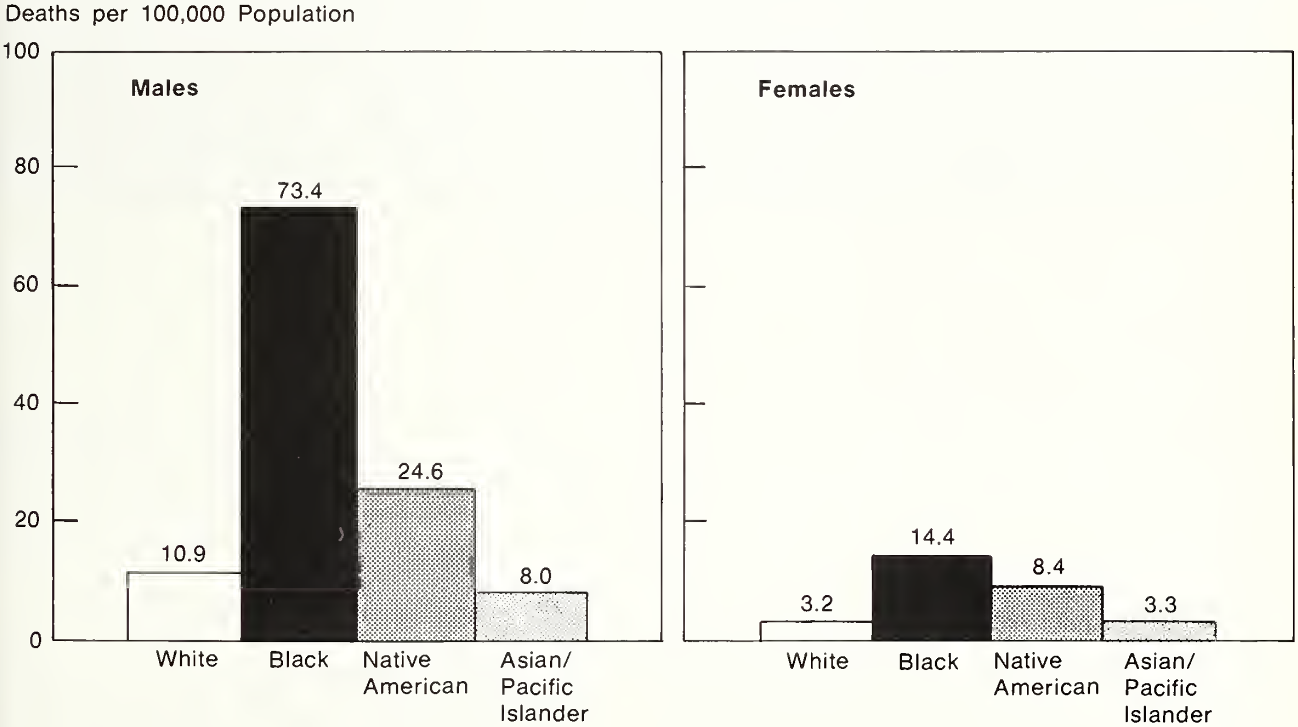
These findings are devastating, particularly in light of the tremendous advancements made in medical science and technology. The findings clearly indicate, however, that New Jersey's minority population has not benefited equally from these medical advancements.

Concern about these issues, along with the need for demonstrative action, has led UMDNJ to develop the Minority Health Institute. UMDNJ established the Minority Health Task Force (a group of minority administrators and faculty within UMDNJ and representing the University's three campuses in Newark, Piscataway/New Brunswick, and Stratford/Camden) as the advisory body for the Institute. Members of the Task Force represent major disciplines and specialties within medicine and dentistry, including adolescent medicine, pediatrics, obstetrics and gynecology, mental health, dentistry, and law.

The mission of the Minority Health Institute is to analyze risk factors associated with preventable morbidity and premature mortality among minority and poor populations in New Jersey, and to develop and recommend priorities for establishing demonstrative interventions on those risk factors. In furtherance of its mission, the Institute will conduct or sponsor research of those problems that directly affect minority health status, compile and maintain a central database of information concerning minority health; and advocate for and conduct health education and outreach efforts concerning minority health issues. The Institute will disseminate the results of its findings to public policymakers, state and local health and social services agencies, national health professionals and organizations, and the community. It is UMDNJ's hope that the Institute will be viewed as a creditable source of information regarding minority health, and as a vehicle to assist in the development of appropriate health care programs.

SUMMARY

Although advances in biomedical science and technology have resulted in increased life expectancy for whites, minorities in the United States and



*Death rates for hispanics are not available. Death rates for native Americans and Asian/Pacific Islanders probably are underestimated due to less frequent reporting of these races on death certificates as compared with the census.

Report of the Secretary's Task Force on Black and Minority Health. United States Department of Health and Human Services, Volume 1. Executive Summary, page 159.

Figure 2. ***Average annual age-adjusted death rates for homicide for persons under 45 years of age, 1979-1981.****

Table. *Average annual total and excess deaths in blacks, selected causes of mortality, United States, 1979-1981**

	Excess Deaths Males and Females Cumulative to Age 45		Excess Deaths Males and Females Cumulative to Age 70	
Causes of Excess Death	Number	Percent	Number	Percent
Heart Disease and Stroke	3,312	14.4	18,181	30.8
Homicide and Accidents	8,041	35.1	10,909	18.5
Cancer	874	3.8	8,118	13.8
Infant Mortality	6,178	26.9	6,178	10.5
Cirrhosis	1,121	4.9	2,154	3.7
Diabetes	223	1.0	1,850	3.1
Subtotal	19,749	86.1	47,390	80.4
All Other Causes	3,187	13.9	11,552	19.6
Total Excess Deaths	22,936	100.0	58,942	100.0
Total Deaths, All Causes	48,323		138,635	
Ratio of Excess Deaths to Total Deaths	47.4%		42.5%	
Percent Contribution of Six Causes to Excess Death	86.1%		80.4%	

**Report of the Secretary's Task Force on Black and Minority Health.* United States Department of Health and Human Services. Volume 1, Executive Summary, Page 5, 1985.

in New Jersey have not received equal benefit. The establishment of the UMDNJ-Minority Health Institute is a critical step toward understanding and ameliorating the disparity in health status between minority and non-minority populations in New Jersey. The location of the Institute within the state's academic health science center is appropriate and reflects UMDNJ's commitment to the resolution of factors that have contributed to the poor health status of minorities in New Jersey.

Editor's Comment. The concerns expressed in this paper were echoed by Louis Sullivan, MD, secretary of Health and Human Services. In his keynote address to the 1989 Annual Meeting of the American Public Health Association, he said, "Minority health status is on a slippery slope, and there are no secure footholds." He emphasized the points enumerated by the authors and pointed out that blacks have less access to care, regardless of income. We hope the UMDNJ-Minority Health Institute can play a significant role in narrowing the gap between different tiers of health care. The Bush administration has resolved to do its part. ■ HDS

REFERENCES

1. Department of Health and Human Services (DHHS): *Report of the Secretary's Task Force on Black and Minority Health,* Volume I. Executive Summary. Washington, DC, August 1985.
2. Davis HM: *Our People are Dying, Blacks in New Jersey 9th Annual Report.* New Jersey Public Policy Research Institute, September 1989.
3. United States Department of Justice: *The Risk of Violent Crime.* Washington, DC, May 1985.
4. *The New York Times:* Life expectancy rates widen over racial lines. March 16, 1989.
5. Center for Health Statistics, New Jersey State Department of Health: personal communication.
6. New Jersey State Department of Health, Division of AIDS Prevention and Control: Monthly statistics report. Trenton, New Jersey, May 31, 1989.
7. New Jersey State Department of Health, Preliminary Report Health Profile: *Black and Minority Populations in New Jersey,* Trenton, New Jersey, June 1989.

Professional Medical Conduct Reform Bill

MICHAEL B. GROSSMAN, DO

This new law closes the many loopholes in the previous statute. Physicians should review the entire law; it is readable and fairly understandable.

On his last working day in office, Governor Thomas Kean signed the Professional Medical Conduct Reform Bill into law. The bill was originally Senate Bill 2936 (see page 385) and was sponsored by Senator Richard Codey.

Passage of this bill will move medical discipline forward in the state of New Jersey. This current legislation makes a contribution to ensuring New Jersey citizens the high quality of care they have expected of physicians. I believe all New Jersey physicians interested in quality of care will applaud this new law.

THE OLD LAW

This law closes the many loopholes in the previous statute that required hospitals to report all reduction of privileges by their staff members. Under the old law, those reports were not required to be filed until the governing board of the hospital approved the action. Sometimes many years passed and in many more instances the governing board never took an action so there was no report. Many conscientious physicians who were concerned about their problem colleagues were frustrated in their attempts to do their jobs as chiefs of service and department chairmen.

THE NEW LAW

The new law requires the reporting to occur within seven days from the institution of the action with

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Dr. Grossman is president of the State Board of Medical Examiners (SBME). Correspondence may be addressed to Dr. Grossman, SBME, 28 West State Street, Trenton, NJ 08608.

or without approval by the governing body. All types of actions including those undertaken voluntarily and involuntarily and those mandatory supervision and requirements for consultation are to be reported.

Reporting a physician whose privileges have been reduced does not necessarily mean that he will be disciplined nor does it necessarily mean that he will lose his license. It is the intention of the Board to attempt to identify physicians whose skills have deteriorated and to direct them into a re-education process if possible. Of course, the more egregious cases probably will require some form of discipline.

The Board feels strongly that physicians who are aware of impaired and/or incompetent colleagues now have a legal as well as a moral requirement to report to the Board, and the Board will expect that to occur appropriately.

Another major reform included in the new law is the requirement that physicians report their colleagues who could represent a danger to patients. This is the first time in New Jersey that physicians have a legal requirement to inform the Board about their colleagues. That report must be forthcoming if they are in possession of information that another physician either is impaired or incompetent in such a fashion that patients could be at risk. It does not require that the reporter wait until a patient has been harmed but only that a patient could be in danger. Exempted from that requirement are physicians who become aware of impairments by virture of being a treating physician. That particular arena of doctor/patient confidentiality is appropriately protected by this law. However, the Board feels strongly that physicians who are aware of impaired and/or incompetent colleagues now have a legal as well as a moral requirement to report to the Board, and we will expect that to occur appropriately.

PRACTITIONER REVIEW PANEL

The law creates a practitioner review panel that will be comprised of three physicians, three public members, a hospital administrator, a government representative, and a member of the Board. The member of the Board may not be chairman of the panel and will not be able to vote on any matters before the Board that have been reviewed by the panel. This panel is to receive all reports of settled or adjudicated malpractice actions. There no longer is a monetary threshold. For the first time, insurance companies will be required to report to the Board those physicians whose malpractice insurance is cancelled or upon whom a surcharge is levied. The panel also would receive reports of reduction in hospital privileges. I anticipate that the panel would be a very hardworking group meeting at least a full day a month, if not more often. The Board is looking forward to having another group of informed individuals to participate in the review and regulation process, making recommendations as to appropriate action.

LEGAL PROTECTION

The new law provides that Board members, employees of the Board, and consultants to the Board shall be provided with legal counsel by the attorney general and also shall be indemnified by the state of New Jersey for good faith work in that capacity. It also provides excellent immunity for good faith reporting in the colleague reporting section. Additionally, there is good protection for the peer review process.

MEDICAL DIRECTOR

Additionally, a fulltime medical director who has knowledge of chemical dependency is mandated. The Board has been looking for someone prior to the passage of this law and continues its search. Additionally, the commissioner of health now has a seat on the Board.

OTHER ASPECTS OF THE LAW

There are a number of other important aspects of the statute beyond the scope of this article. I would suggest that all physicians may want to request a copy of the law itself. It is readable and fairly understandable. The Board of Medical Examiners plans to host a seminar to review S-2936 with interested parties including physicians, medical directors, and chiefs of services.

CONCLUSION

As stated in the beginning of the article, it is the opinion of the State Board of Medical Examiners that this new law represents a positive step forward in regulation in the state of New Jersey. The Medical Society of New Jersey was an important participant in the formulation of this law. I believe the desires of the Medical Society were about 90 percent satisfied by the final compromise draft. I believe the desires of the State Board of Medical Examiners also were satisfied about 90 percent. For the first time, it appears to me we have good legislation that will make the identification of impaired and incompetent doctors easier, the reporting to the regulators more protected, and the disciplinary process more efficient, and that is as it should be. ■

NOTEBOOK

TRUSTEES' REPORT

A regular meeting of the Board of Trustees was held on March 18, 1990, at the executive offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Report of the President . . .
(1) New Appointments . . . Announced appointments of Karl T. Franzoni, MD, as Speaker of the House of Delegates, and of Frances J. Dunston, MD, MPH, as Commissioner of Health.
(2) Medicare Reimbursement on Unassigned Claims . . . Referred to the AMA delegation for consideration a letter from Michael Bernstein, MD, president of the Passaic County Medical Society, suggesting that the resolution to be submitted to the AMA (opposing the new Medicare law requiring physicians to file claim forms for patients) be modified to request that, in the event the requirement is not rescinded, the Health Care Financing Administration reimburse physicians for the added expense of filing claim forms.
(3) Automobile Insurance Reform Act of 1990 (No-Fault) (A-1; S-2295) . . . Heard from Mr. Maressa that there would be no amendments to this bill unless the governor personally approved them; hence, Mr. Maressa felt no purpose was served by appearing at the remaining public hearing.
(4) Membership in JEMPAC . . . Reiterated the Board's request that county medical societies urge members of executive committees to join JEMPAC in 1990. Also, was advised that JEMPAC is a political action committee and its legal purpose is to raise money for contributions to legislators; it does not lobby.
(5) AMA Leadership Conference . . . Noted record attendance at the AMA's National Leadership Conference and that the AMA search committee is ready to accept applications for the position of executive vice-president of the AMA, created by the resignation of James H. Sammons, MD.
(6) Tillinghast Report . . . Mentioned that a review of the Medical Inter-Insurance Exchange of New Jersey claims administration was performed by an outside consultant, Tillinghast.
(7) Retiring Board Members . . . Stated that retiring Board members (Drs. Formica, Robinson, Yood, and Zawadsky, and Ms. Goldie, student member) will be given the opportunity to make statements at the next Board meeting, if they so desire.

Report of Executive Director . . .
(1) Paid Memberships . . . Noted MSNJ paid memberships as of February 28, 1990, totaled 6,037, and heard that it appears likely that as of March 17, 1990, total paid memberships will match or possibly exceed the 1989 total.
(2) MSNJ Financial Statements . . . Reviewed and approved the financial statements for the period ending January 31, 1990.
(3) Legislation . . . Noted the following four items: *No-Fault A-1* . . . Unanimously approved the initiation of litigation on the constitutionality of the annual tax of physicians' licenses and the ban on balance billing; *Living Will Coalition* . . . Concurred with the recommendations that MSNJ participate in the Living Will Coalition but not underwrite the special budgetary project; *Commissioner of Health (S-642)* . . . Agreed not to list this bill (to delete the requirement of a medical license to be commissioner of health) for a vote at this time as it is inappropriate since the new commissioner of health is a medical doctor; and, *Optometric Use of Drugs (A-743)* . . . Noted that MSNJ is actively opposed to A-743 and that county medical societies and MSNJ have contacted appropriate legislators.
(4) Litigation . . . Noted the following items: *MSNJ versus Merin* . . . Noted that there has been no response to MSNJ's request for a motion to stay implementation of the commissioner's surcharge rule, and noted that penalty for not paying the surcharge would be cancellation of a physician's professional insurance policy; *State Board of Medical Examiners versus Sinha* . . . Noted MSNJ has entered this case amicus (this case involves the supervision of a certified nurse anesthetist by an anesthesiologist) and the opinion of the court is pending; *Subpoena of Physician Records by State Board of Medical Examiners (SBME)* . . . Mentioned that this case involves a significant development, since subpoenas issued by SBME now are challengeable, and when challenged will be referred to a trial judge for development of a record; and, *PRO versus Diaz* . . . Noted that The PRO of New Jersey, Inc. cited Doctor Diaz for gross and flagrant violation and rec-

ommended removal from the Medicare program and the case was appealed and the decision was modified: Dr. Diaz will continue with the program, but his actions will be monitored.

UMDNJ Report . . . Received a report from Paul F. Larson, MD, noting the decrease in appropriations for UMDNJ due to the budget cuts and that this will create a reduction in the work force, and that estimates of the tax increase for institutions of higher education will restrict further the funds of UMDNJ. Also, noted that new research at UMDNJ disclosed a hidden antibody occurring in some patients with Lyme disease.

NJ Hospital Association . . . Received a report from Louis P. Scibetta, noting the upcoming NJ Hospital Association Annual Meeting and litigation initiated by the New Jersey public advocate challenging a proposed nongroup rate increase resulting in a decision against Blue Cross.

Committee on Conservation of Vision . . . Approved the following:

That the 1990 Eye Health Screening Program be held the week of September 24, 1990.

Physicians' Health Program . . . Approved the following:

That the MSNJ Board of Trustees accept the budget proposed by the Board of Directors of the Physicians' Health Program.

Task Force on the Shortage of Nurses and Technical Personnel . . . Unanimously approved the following:

That the Medical Society of New Jersey endorse the education mobility concept in nursing, i.e. from the nursing assistant through the various levels of nursing education.

Also, noted that the Task Force will place greater emphasis on the allied health field, also crippled by shortages. In addition, indicated that Dr. Formica is MSNJ's representative on the Department of Health's Nursing Advisory Committee and Dr. Madara will serve as the alternate representative.

Task Force on Patient Care for the Under-Insured . . . Referred the following to the Committee on Medicaid:

That an immediate study be undertaken by MSNJ to bring about changes in current Medicaid law for the purpose of addressing the issue of uncompensated care.

Also, approved the following recommendation:

That the Uncompensated Care Trust Fund compensation for benefits be expanded to cover physician services.

In addition, defeated the following recommendation:

That the mechanism of payment for services under the Uncompensated Care Trust Fund be administered via a hospital-created intermediary concept.

Finally, approved the following recommendation:

That the MSNJ Task Force on Patient Care for the Under-Insured become part of a Blue Ribbon Task Force composed of representatives from the New Jersey Hospital Association, the New Jersey Department of Health, the New Jersey Department of Health and Human Services, the Division of Medicaid, and members of the industry and the Legislature, to meet the challenge of providing patient care for the under-insured.

Unfinished Business . . .
(1) AIDS Act of 1989 . . . Endorsed the proposed legislation (establishing certain eligibility requirements in the program of grants to the states for counseling and testing with respect to AIDS and for other purposes) and directed that Congressman Dannemeyer be so advised.
(2) Physician Assistants . . . Voted to continue to participate in the Task Force hearings; however, MSNJ efforts will concentrate on keeping the pilot program within responsible parameters.

New Business . . . Approved the request to provide a letter of support for a grant application to conduct statewide diabetes activities as requested by the New Jersey State Department of Health, Diabetes Control Program. ☐

UMDNJ NOTES

The University of Medicine and Dentistry of New Jersey (UMDNJ) dedicated a $4.5 million Clinical Research Center that will provide state-of-the-art patient rooms and analytic laboratories for testing new drugs, biomedical devices, and medical therapies. Studies at the Center will support and enhance strong medical school research programs in heart disease, rheumatology, diabetes, and reproductive endocrinology.

The surprise birth of a pygmy mouse from a genetically altered egg could be the first step in identifying the cause of—and possibly treatment for—some human growth abnormalities. Scientists at UMDNJ-Robert Wood Johnson Medical School, Piscataway, were breeding mouse lines to study genetic mutations when the tiny mouse turned up. The mice could be a model for studying growth abnormalities such as human dwarf syndrome. They also may provide a greater understanding of the pathways involved in growth and development. Twenty-five percent of the patients who visit endocrinology clinics nationwide have a growth abnormality.

The cause of Alzheimer's disease is associated with a decrease in the amount of a protein hypothesized to regulate the level of free calcium in brain cells, according to research conducted at UMDNJ-New Jersey Dental School and UMDNJ-Graduate School of Biomedical Sciences, Newark.

The studies show that Alzheimer's patients have markedly decreased levels of the calcium-bonding protein, Calbindin-D28k, that may regulate the amount of calcium allowed to accumulate in the nerve cells of the brain. Without adequate amounts of this protein, calcium slowly accumulates, reaches toxic levels, and kills the cells. The research is led by Dr. Sylvia Christakos, associate professor of biochemistry, and Dr. Anthony Iacopino, a postgraduate fellow.

Some patients with heart problems are swallowing an ultrasound probe so our UMDNJ cardiologist can examine parts of the heart unable to be seen by traditional methods. More than 50 patients have been diagnosed at Robert Wood Johnson University Hospital, New Brunswick, with this technique that allows detailed observation of the heart. The ultrasound probe is inserted in the esophagus, the canal in the throat that carries food to the stomach. The back of the heart is flush against the esophagus, so this “back-door” approach allows doctors to get clear color pictures of that side of the beating heart.

Dr. Daniel Shindler, director of cardiac ultrasound at UMDNJ-Robert Wood Johnson Medical School, is one of only a few physicians doing the procedure in the state. Dr. Shindler inserts the probe, attached to a tube, down the patient's throat. The patient is awake but sedated and the throat is sprayed with a local anesthetic. The procedure usually takes about 15 minutes. Two-thirds of the patients examined were treated as outpatients, with no hospital stay required.

A comprehensive Microsurgery Center—with services ranging from emergency finger reattachment to the repair of skin defects—has been initiated at UMDNJ-Robert Wood Johnson Medical School, New Brunswick. It is the first of its kind in central New Jersey. The unit, a collaborative effort with Robert Wood Johnson University Hospital, comprises three microsurgeons, nurses, physical therapists, and occupational therapists. In addition to the surgical services, this team provides presurgical counseling in nonemergencies and complete postoperative care.

New programs to diagnose and treat breast cancer, including a screening center for women at high risk, are part of the new Division of Comprehensive Breast Services at UMDNJ-Robert Wood Johnson Medical School, New Brunswick. The new screening center is offering services to women who are at high risk of contracting breast cancer, especially those who have a history of breast disease in their family. The center offers counseling, physical examinations, and instruction in self-examination.

A special surgical technique used to remove certain skin cancers while preserving healthy tissue is available for the first time at UMDNJ-Robert Wood Johnson Medical School, New Brunswick. The method is used primarily to treat two types of malignancies in the outer layer of the skin: basal and squamous cell cancers. Called Mohs micrographic surgery, after Dr. Frederic Mohs, the surgeon who developed it in the 1930s, the procedure has been modified in a number of ways that include technical improvements.

Dr. Michael Auletta, a dermatologic surgeon, introduced the procedure to UMDNJ. ☐
Stanley S. Bergen, Jr, MD

MSNJ AUXILIARY

In the January 1974 *Shingle,* MSNJ executive director, Vincent A. Maressa wrote, “The Auxiliary can and should become an extension of the Medical Society of New Jersey in the fields of legislation and public relations.” He added that the Auxiliary should “continue to provide community service and public relations programs and assist us with ours.”

Sixteen years later, the Auxiliary continues to do just that. Through representation on state and county medical society executive boards and committees, auxiliary members have become aware of the Society's goals and programs, and have offered assistance in their implementation. Across the state, county auxiliaries and medical societies have joined forces to address legislative concerns. Together they have organized physician voter registration drives and encouraged medical families to vote for candidates who support sound medical legislation, and lobbied vigorously for the introduction of constructive health legislation and the defeat of undesirable bills.

In 1989 to 1990, auxiliary members nationwide participated in phone blitz operations, letter writing campaigns, and visits to lawmakers' offices to protest ETs; worked successfully to ban smoking on all domestic flights; protested medical waste registration fees levied on New Jersey physicians by the Department of Environmental Protection; and supported initiatives to introduce legislation mandating more stringent penalties for drunken driving on New Jersey waterways.

Most importantly, however, the Auxiliary spent the year continuing to promote good will in the community by raising thousands of dollars for nursing scholarships, health career grants, and other philanthropic endeavors such as the Heart Association, the American Cancer Society, and various mental health and drug prevention groups.

County auxiliaries also sponsored health education projects and activities aimed at both improving the lives of people in the community and enhancing the public's image of medicine and the medical family. Programs covered a wide range of topics: seminars for

[redacted]

teachers and coaches on the abuse of anabolic steroids and the use of safety helmets to prevent head injuries; multilingual sessions to teach teenagers proper babysitting skills; high school health education days; and the distribution of infant car seats. In addition, there were eye screenings, cholesterol checks, sun screenings, food/clothing drives for the homeless and needy, and an "Adopt-A-Nursing Home" project in which auxiliary members visit residents and provide them with special request items.

Finally, county auxiliary members celebrated National Doctors' Day. Poster contests were held in many schools and the artwork, depicting how doctors serve people in the community, was displayed in hospital lobbies, shop windows, and office buildings. Auxiliary members personally recognized physicians by presenting them with red carnations and sending messages of appreciation: "More than anyone else we know how hard you work; the long hours and pressures you endure; and how much you really care. Happy Doctors' Day." ☐ Marion H. Geib

NEW MEMBERS

The Medical Society of New Jersey would like to welcome the following new members:

Atlantic County
Michelle M. Battistini, MD
Marc D. Feldman, MD
Mahesh Ghayal, MD
Steven J. Giamporcaro, MD
Stuart J. Goldman, MD
Scott R. Kaneff, MD
Philip W. Mercer, MD
Yatish B. Merchant, MD
Donald P. Mitrane, MD
Alexander Onopchenko, MD
Jack Shakarshy, MD

Bergen County
Howard M. Baruch, MD
Brian J. Bauer, MD
Alexander Biener, MD
Nicholas G. Bonvicino, MD
Laura E. Brenner, MD
Frank M. Candido, MD
Michael E. Casser, MD
Benjamin L. Co, MD
Roger A. Coven, MD
Shanti Dhupar, MD
John A. DiLullo, MD
Amina Elkassir, MD
James W. Geuder, MD
Michael L. Gross, MD
Russell J. Horn, MD
Chee Gap Kim, MD
Evan G. Kushner, MD
Glenn R. Leslie, DO
Joanne Leslie, MD
Lancaster Lo, MD
Jay Meyerowitz, MD
Anne J. Miller-Breslow, MD
Margaret M. Moogan, MD
John F. Nitti, MD
Andrew L. Pecora, MD
Joseph A. Rizzo, MD
Lois P. Robinson, MD
Constantine Rossakis, MD
Mark D. Schlesinger, MD
Eric D. Somberg, MD
Mary Swajian, DO

Burlington County
Neil H. Dorfman, MD
Martha B. Howard, MD
Pamela F. LeDeaux, MD
John A. Volpe, DO
Samuel H. Wasser, MD

Camden County
Carmen I. Barres, MD
Steven S. Baumgarten, MD
Simcha Cipkin, MD
William deLaRosa, DO
Adam B. Elfant, MD
Stuart C. Finch, MD
Karen L. Fung, MD
Christopher D. Koprowski, MD
John J. Litz, MD
Martha S. Matthews, MD
Cheryl M. Mitchell, MD
Jayesh P. Patel, MD
Charles E. Rawlings, III, MD
David B. Soll, MD
Eric D. Strauss, MD
William Tham, MD
Thomas V. Whalen, MD
David S. Zalut, MD

Cumberland County
Michael L. Anderson, MD

Essex County
Fred M. Aueron, MD
William A. Christiana, MD
Mark S. Cukierman, MD
Keith E. Fraser, MD
Senthamarai Gandhi, MD
Howard A. Holtz, MD
Stefanie S. Jacobs, MD
Jonathan Kiev, MD
Deana M. Lazaro, MD
Robert D. Mills, DO
Shamkant P. Mulgaonkar, MD
Arnold D. Paulino, MD
Michael Schulder, MD
Loreta M. Uy, MD

Gloucester County
Vivian Vega, MD

Hudson County
James J. Cadden, MD
Anthony G. Del Piano, MD
Luis A. Gonzalez, MD
Frances B. Pelliccia, MD
Kothalanka S. Ramakrishna, MD
Nicholas P. Scarpa, MD

Hunterdon County
Patrick M. Collalto, MD
Shelley E. Justa, MD

Mercer County
Margaret M. Barnes, MD
Joaquin J. Cantillo, MD
Daniel J. Cohen, MD
Joseph M. DellaCroce, MD
Kiritkumar T. Desai, MD
Richard E. Dixon, MD
Dorothea J. Drayer, MD
Gerard D. Fritz, MD
Michael E. Goldberg, MD
John A. Harman, MD
Richard T. Magrini, MD
Cynthia Matossian, MD
Jeffrey A. Mattes, MD
James M. O'Mara, MD
Jay R. Poliner, MD
Donald P. Rosen, MD
Theodore E. Spiro, MD
Arleen S. Zabell, MD

Middlesex County
Larry J. Cohen, MD
Howard N. Garson, MD
Robert R. Goodman, MD
Michael A. Healy, MD
Suzanne M. Kabis, MD
Steven J. Levin, MD
William J. Lowe, III, MD
Rohitkumar I. Shah, MD
Michael J. Simon, MD
Manuel R. Tan, MD
Lawrence N. Tanenbaum, MD
Louis Tsarouhas, MD
Irene L. Wapnir, MD

Monmouth County
Joseph Cohen, MD
Miguel Damien, MD
Paul Gennaro, MD
Peter T. Hetzler, MD

Stephen A. Kardos, DO
Debra M. Ray, MD
Neal Ruda, MD

Morris County
Eric J. Benvenuti, MD
Herbert C. Conaway, Jr, MD
Vincent J. Emiliani, MD
James M. Fattu, MD
Matthew D. Iammatteo, MD
Vina H. Isaac, MD
Juan F. Lopez, MD
John R. McCormick, MD
Winston C. Moy, MD
Richard M. Neibart, MD
Jerry L. Pinkerton, MD
Mark A. Rieger, MD
Kathleen T. Ruddy, MD
John T. Truman, MD

Ocean County
Jospeh A. Casadonte, MD
Clint C. Ferenz, MD
Rami E. Geffner, MD
Neal D. Gittleman, MD
John Infantolino, MD
Rosanne Lamia, MD
Jeffrey M. Lipper, MD
Lawrence J. Schaefer, MD
Beatrice A. Symchowicz, MD

Passaic County
Mildred D. Agres, MD
Gail J. Anderson, MD
Michael F. Ardito, MD
Avrill R. Berkman, MD
Sylvia A. Coscia, MD
Oksana M. Demediuk, MD
John J. Doerr, MD
Ai R. Lee, MD
Kannan Ramamurthy, MD
Klaus Schreiber, MD
Joseph A. Silvano, MD
Ramasamy Swaminathan, MD
Chellappan Vijayakumar, MD

Somerset County
Anne M. Dubosky, DO
Ruby A. Halper-Erkkila, MD

Sussex County
Edward F. Babb, MD
Richard T. Bernstine, MD
Eugene Chin, MD
Stephen P. Landauer, MD
Daniel C. Monahan, MD

Union County
Lynne J. Acierno, MD
Michael B. Alexander, MD
Stephanie L. Arlis-Mayor, MD
Emir V. Duany, MD
Eli D. Finkelstein, MD
Stephen Gal, MD
John T. Gianis, MD
Todd P. Krell, MD
Donald A. Leichter, MD
Elzbieta E.K. Ostromecki, MD
Michael M. Plate, MD
Ricardo E. Rodriguez, MD
Scott D. Schoifet, MD
Albert L. Strunk, MD
Dulce Suapengco-Samonte, MD
Anthony J. Tarasenko, MD
Rita M. Watson, MD

PLACEMENT FILE

The following physicians have written to the Executive Offices of MSNJ seeking information on opportunities for practice in New Jersey. The information listed below has been supplied by the physicians. If you are interested in any further information, please contact the physicians.

GENERAL PRACTICE

Leonid Belopolsky, MD, 955 Chanticleer Dr., Cherry Hill, NJ 08003. Moscow 1961. Board certified (ANES). Also, internal medicine. Available.

Randi Silverbrook, DO, 3024 Wistar Ct., Bensalem, PA 19020. College of Osteopathic Medicine 1985. Partnership or group. July 1990.

INTERNAL MEDICINE

Leonid Belopolsky, MD, 955 Chanticleer Dr., Cherry Hill, NJ 08003. Moscow 1961. Board certified (ANES). Also, general practice. Available.

David D. Gross, MD, 1045 Liberty St., Apt. 1, Trenton, NJ 08611. St. George's (Grenada) 1987. Board eligible. Available August 1990.

Marc Kesselhaut, MD, 1 Rustic Ridge, C16, Little Falls, NJ 07424. St. George's 1986. Board eligible. Solo or partnership in Mercer, Somerset, Burlington, Hunterdon, or Middlesex counties. Available September 1990.

Suresh Reddy, MD, 3301 Cobblestone Cir., #6, Waterloo, IA 50703. Kakatiya (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

NUCLEAR MEDICINE

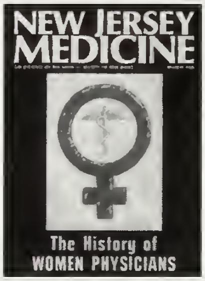
Haresh P. Solanki, MD, 3 West Elm St., Islip, NY 11751. MP Shah Medical College (Iran) 1980. Board eligible. Group or hospital-based. Available July 1990.

PATHOLOGY

Judith Vople, MD, 106 Orlando Blvd., Toms River, NJ 08757. UMDNJ 1985. Board eligible. Group or hospital-based. Available July 1990.

PHYSICAL MEDICINE AND REHABILITATION

Robert B. Thorne, MD, 112 Woodside Ave., Trenton, NJ 08618. Rutgers 1980. Board certified. Part time or full time. Available.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New York State Boards of Medicine & Dentistry 25-hour accredited seminar & workshop on latest theories and techniques of manual & electro-acupuncture, TENS & simple non-invasive diagnostic methods (including cardio-vascular, neuromuscular, central nervous systems & "Bi-Digital O-Ring Test"), applicable towards 300-hour requirement for certification to practice acupuncture, will be given periodically for licensed clinicians (with or without prior training) on 3-day weekends (Fri-Sun) of March 23-25, May 11-13, June 15-17, July 13-15, Sept. 21-23, and Dec. 14-16, 1990, at Milford Plaza Hotel, 45th St. & 8th Ave., or 110 Fulton St. (12th fl.), New York City.

The 6th Annual International Symposium on Acupuncture & Electro-Therapeutics will be held at Columbia University, School of International Affairs, 420 W. 118th St., N.Y. City, during October 25-28, 1990.

These meetings are co-sponsored by the International College of Acupuncture & Electro-Therapeutics & its official journal, Acupuncture & Electro-Therapeutics Research, The International Journal (published by Pergamon Press & indexed in 15 major indexing periodicals, including Index Medicus), Heart Disease Res. Foundn, N Y Pain Center of Long Island College Hospital (a teaching hospital of SUNY-Health Science Center at Brooklyn); Electrical Engineering Dept., Manhattan College; Nordic Medical Acupuncture Society (Scandinavia); Schmerz Therapeutische Kolloquium (West Germany); Japan Bi-Digital O-Ring Test Assn; etc. The meetings are also eligible for AMA CME Cat. I credit (about 40 credit-hours for the Symposium).

For information on meetings or submission or presentation of papers, contact Symposium Chairman Y. Omura, M.D., Sc.D., 800 Riverside Drive (8-I) New York, NY 10032 Tel: (212) 781-6262 (10am to 10pm 7 days a week) or (212) 928-0658, Dr. Shinnick (212) 727-9674, or Bro. Michael Losco (212) 920-0162.

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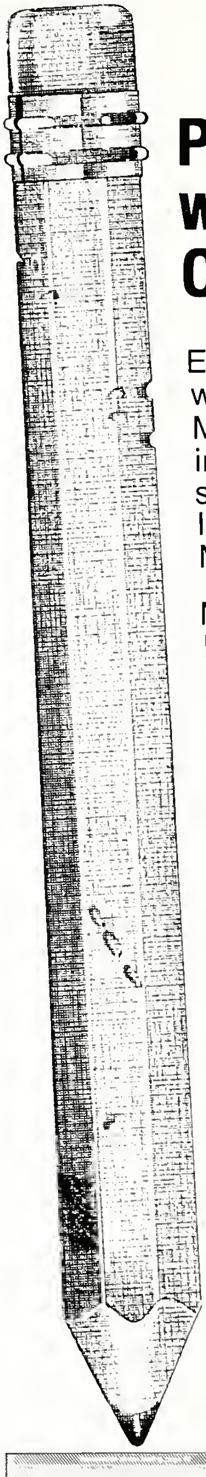

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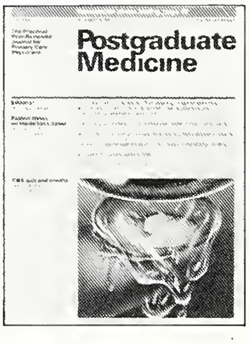

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CONTINUING EDUCATION

ALLERGY

June

21- **In Vitro Allergy Seminar**
24 The Registry Resort, Naples, Florida
(Holy Name Hospital)

ANESTHESIOLOGY

June

13 **Monthly Conference**
20 7-7:30 A.M.—Newcomb Medical Center, Vineland
(Newcomb Medical Center)

28 **Grand Rounds**
7-8 A.M.—Newcomb Medical Center, Vineland
(Newcomb Medical Center)

CARDIOLOGY

June

6 **17th Annual Pacemaker Meeting**
8:30 A.M.-3:30 P.M.—Overlook Hospital, Summit
(Overlook Hospital and Newark Beth Israel Medical Center)

DERMATOLOGY

June

20 **Summer Skin Problems**
1:30-2:30 P.M.—HMO, New Brunswick
(Rutgers Community Health Plan)

28 **Common Tumors of the Skin**
12 Noon-1 P.M.—Freehold Area Hospital, Freehold
(AMNJ)

INFECTIOUS DISEASE

June

1 **Clinical Management of HIV**
8 **Infection**
8:30-9:30 A.M.—Chilton Memorial Hospital, Pompton Plains
(AMNJ and NJDOH)

6 **Clinical Management of HIV Infection**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ and NJDOH)

6 **Psychiatric Aspects of AIDS**
2-3 P.M.—John E. Runnells Hospital of Union County, Berkeley Heights
(AMNJ and NJDOH)

7 **Clinical Management of HIV Infection**
10-11 A.M.—Meadowview Hospital, Seacaucus
(Meadowview Hospital)

8 **Counseling and Testing for HIV Infection**
8:30-9:30 A.M.—Chilton Memorial Hospital, Pompton Plains
(AMNJ and NJDOH)

9 **AIDS and the Obstetrician/Gynecologist**
10:30-11:15 A.M.—Trump Plaza Hotel Casino, Atlantic City
(AMNJ and NJDOH)

13 **Counseling and Testing for HIV Infection**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ and NJDOH)

13 **AIDS Update**
11 A.M.-12 Noon—West Hudson Hospital, Kearny
(West Hudson Hospital)

22 **Clinical Management of HIV Infection**
12 Noon-1 P.M.—Medical Center of Ocean County, Point Pleasant
(AMNJ and NJDOH)

27 **Clinical Management of HIV Infection**
9-10 A.M.—Elizabeth General Hospital Center, Elizabeth
(AMNJ and NJDOH)

MEDICINE

June

1 **Prevention of Lower Extremity Amputations**
9-10 A.M.—St. Francis Medical Center, Trenton
(AMNJ and NJDOH)

1 **Continuing Medical**
8 **Education Program**
15 12 Noon-1 P.M.—South Jersey
22 Hospital System, Bridgeton
29 *(South Jersey Hospital System)*

1 **Diabetic Retinopathy**
9-10 A.M.—St. Francis Medical Center, Trenton
(AMNJ and NJDOH)

4- **11th Annual Comprehensive**
22 **Course in Occupational Health**
8:30 A.M.-5 P.M.—Robert Wood Johnson Medical School, Piscataway
(UMDNJ)

5- **Annual Meeting**
6 Trump Plaza Hotel and Casino, Atlantic City
(NJ Gastroenterological Society and NJ Society for Gastroenterological Endoscopy)

5 **Fourth Annual Internal**
12 **Medicine Board Review**
19 5:30-7:30 P.M.—Cooper Hospital,
26 Camden
(Cooper Hospital/UMDNJ)

5 **Epidemiology of Salmonella in Eggs**
12:15-1:30 P.M.—John Fitch Plaza, Trenton
(NJDOH)

6 **Lyme Disease**
1:30-2:30 A.M.—HMO, New Brunswick
(Rutgers Community Health Plan)

6 **Adrenal Disease**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

6 **Medical Lecture Series**
13 10:30-11:30 A.M.—Christ Hospital, Jersey City
(Christ Hospital)

6 **New Approaches to the Treatment of Hypertension**
10:30 A.M.-12 Noon—General Hospital Center, Passaic
(General Hospital Center)

6 **Review Course in Internal**
13 **Medicine**
20 11 A.M.-1 P.M.—Bayonne
27 Hospital, Bayonne
(Bayonne Hospital)

6 **Annual Meeting**
3-9 P.M.—The Manor, West Orange
(NJ Gastroenterological Society/NJ Society for Gastrointestinal Endoscopy)

7 **Erythropoietin**
11 A.M.—St. Joseph's Hospital and Medical Center, Paterson
(St. Joseph's Hospital and Medical Center)

7-8 **Medical Literature Searching**
8:30 A.M.-1 P.M.—Health Sciences Libraries, UMDNJ, Newark
(UMDNJ)

9 **Diabetes and Pregnancy**
10:30-11:15 A.M.—Trump Plaza Hotel Casino, Atlantic City
(AMNJ and NJDOH)

11 **Lyme Disease**
11:30 A.M.-1 P.M.—East Orange General Hospital, East Orange
(AMNJ)

12 **Renal Biopsy Conference**
12:30-2 P.M.—Barnert Memorial Hospital Center, Paterson
(Barnert Memorial Hospital Center)

12 **Malpractice Prevention**
8:30 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

13 **Chronic Pain Management and Issues Related to Iatrogenic Addiction**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

13 **Critical Health Care Issues in the Workplace: AIDS and Substance Abuse**
8 A.M.-5 P.M.—Sheraton Fairfield Hotel
(Oxford Managed Health Care, Inc.)

13 **Mild to Moderate Hypertension**
1-1:30 P.M.—Deborah Heart and Lung Center, Browns Mills
(Deborah Heart and Lung Center)

13 **Parkinson's Disease**
8:30 A.M.-5 P.M.—Robert Wood Johnson Medical School, Piscataway
(UMDNJ)

13 **Parkinsonism**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ)

13 **Diabetic Retinopathy**
9-10 A.M.—Elizabeth General Medical Center, Elizabeth
(AMNJ)

13 **Diabetic Nephropathy**
9-10 A.M.—Somerset Medical Center, Somerville
(AMNJ)

13 **Diabetes and Pregnancy**
11:30 A.M.-12:30 P.M.—Hamilton Hospital, Trenton
(AMNJ and NJDOH)

14 **Aspiration Syndrome in the Mentally Retarded**
1-2 P.M.—Woodbridge Developmental Center, Woodbridge
(AMNJ)

14 **Controlling the Tobacco Epidemic**
12:15-1:30 P.M.—John Fitch Plaza, Trenton
(NJDOH)

14-15 **Sinus Endoscopy**
7 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

15 **Diabetes and Pregnancy**
9-10 A.M.—St. Francis Medical Center, Trenton
(AMNJ and NJDOH)

19 **Pursuing Universal Access to Health Care**
12:15-1:30 P.M.—John Fitch Plaza, Trenton
(NJDOH)

20 **Medical Aspects of Nutrition—Anorexia and Weight Loss**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

21 **Continuing Medical Education Series**
12 Noon-1 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center)

21 **Diabetes and Pregnancy**
8:30-9:30 A.M.—Dover General Hospital, Dover
(AMNJ and NJDOH)

21 **Newer Methodology in Detection and Management of Pulmonary Embolism**
5-7 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center)

26 **Movement Analyses in Nonverbal Therapies**
8:30-10 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

27 **Diabetes and Pregnancy**
1:30-2:30 P.M.—Trenton Psychiatric Hospital, Trenton
(AMNJ and NJDOH)

29 **Developmental Disabilities Journal Club for Physicians and Dentists**
11:30 A.M.-12:30 P.M.—Hunterdon Developmental Center, Clinton
(Hunterdon Developmental Center)

July

3 **Grand Rounds**
10 8:30-10 A.M.—Elizabeth General
17 Medical Center, Elizabeth

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24 *(Elizabeth General Medical*
31 *Center)*

OBSTETRICS/GYNECOLOGY

June

5 **Medical Grand Rounds**
12 9:30 A.M.-3 P.M.—Holy Name
19 Hospital, Teaneck
(Holy Name Hospital)

8- **42nd Annual Meeting**
9 Trump Plaza Hotel Casino,
Atlantic City
(New Jersey Obstetrical and
Gynecological Society)

9 **AIDS and the Obstetrician/**
Gynecologist
10:30-11:15 A.M.—Trump Plaza
Hotel Casino, Atlantic City
(New Jersey Obstetrical and
Gynecological Society)

9 **Diabetes and Pregnancy**
10:30-11:15 A.M.—Trump Plaza
Hotel Casino, Atlantic City
(AMNJ and NJDOH)

13 **Diabetes and Pregnancy**
11:30 A.M.-12:30 P.M.—Hamilton
Hospital, Trenton
(AMNJ and NJDOH)

16- **Risk Management**
17 **in Obstetrics/Gynecology**
8 A.M.-5 P.M.—The Diplomate
Hotel, Atlantic City
(UMDNJ)

21 **Diabetes and Pregnancy**
8:30-9:30 A.M.—Dover General
Hospital, Dover
(AMNJ and NJDOH)

21 **Neonatal Problems**
7:30-8:30 P.M.—Freehold Area
Hospital, Freehold
(AMNJ)

27 **Diabetes and Pregnancy**
1:30-2:30 P.M.—Trenton
Psychiatric Hospital, Trenton
(AMNJ and NJDOH)

OCCUPATIONAL MEDICINE

June

6 **Occupational Asthma in**
New Jersey
10:30-11:30 A.M.—Christ
Hospital, Jersey City
(AMNJ)

ONCOLOGY

June

8 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley
Hospital Center, Sussex
(Wallkill Valley Hospital Center)

13 **Tumor Board Conference**
12 Noon-1 P.M.—Memorial
Hospital of Salem County, Salem
(Memorial Hospital of Salem
County)

13 **Tumor Board/Case**
Presentation
9-10 A.M.—Irvington General
Hospital, Irvington
(Irvington General Hospital)

28 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb
Medical Center, Vineland
(Newcomb Medical Center)

July

13 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley
Hospital Center, Sussex
(Wallkill Valley Hospital Center)

OPHTHALMOLOGY

June

7- **Immunologic Disorders of the**
8 **Visual System**
8 A.M.-5 P.M.—New Jersey
Medical School, Newark
(UMDNJ)

PEDIATRICS

June

27 **Office Practicum: 1990**
9:15 A.M.-3:30 P.M.—Ramada
Inn, Clark
(Children's Hospital
of New Jersey)

29 **Management of Pain in**
Pediatrics
12 Noon-1:30 P.M.—Mercer
Medical Center, Trenton
(Mercer Medical Center)

PSYCHIATRY

June

5 **Psychiatry Grand Rounds**
12 8:30-10 A.M.—Elizabeth General
19 Medical Center, Elizabeth
26 *(Elizabeth General Medical*
Center)

6 **Psychiatric Aspects of AIDS**
2-3 P.M.—John E. Runnells
Hospital of Union County,
Berkeley Heights
(AMNJ)

21 **Case Seminars To Improve**
Psychotherapeutic Technique
8-10 P.M.—2 West Northfield
Road, Livingston
(Advanced Psychiatric Study
Group)

7 **Brain, Biology, and Behavior**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

14 **Maintenance ECT: When**
and How?
12 Noon-1 P.M.—All Day, Carrier
Foundation, Belle Mead
(Carrier Foundation)

21 **Effects of Brain Injury on**
Behavior and Emotions
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

27 **Obsessive Compulsive Disorder**
and its Relationship to
Depression
12 Noon-1 P.M.—Trenton
Psychiatric Hospital, Trenton
(Trenton Psychiatric Hospital)

27 **Grand Rounds**
2:30-4 P.M.—Ancora Psychiatric
Hospital, Hammonton
(Ancora Psychiatric Hospital)

July

3 **Psychiatry Grand Rounds**
10 8:30-10 A.M.—Elizabeth General
17 Medical Center, Elizabeth
24 *(Elizabeth General Medical*
31 *Center)*

SURGERY AND ITS SPECIALTIES

June

5 **Weekly Vascular Case**
12 **Conference**
19 7:30-8:30 A.M.—Robert Wood
26 Johnson Medical School, MEB,
108B, New Brunswick
(UMDNJ)

6 **Vascular Grand Rounds**
13 4:30-5:30 P.M.—New Jersey
20 Medical School, B610,
27 Newark
(UMDNJ)

8 **Diagnosis and Surgical**
Management of Esophageal
Reflux and Hiatus Hernia
1-2 P.M.—North Princeton
Developmental Center, Princeton
(AMNJ)

20 **High-Risk Surgery**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

21 **Surgical Grand Rounds**
Program
5-6 P.M.—Shore Memorial
Hospital, Somers Point
(Shore Memorial Hospital)

25 **Surgical Management of Benign**
and Malignant Diseases
12 Noon-1 P.M.—Hospital Center
at Orange, Orange
(AMNJ)

UROLOGY

June

1 **Urology Grand Rounds**
8 3-5 P.M.—New Jersey Medical
15 School, MSB, C600, Newark
22 *(UMDNJ)*

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IN MEMORIAM

Frank J. Albano. At the age of 80, Frank Albano, MD, a member of our Essex County component, died on February 27, 1990. Born on July 19, 1909, in Newark, Dr. Albano received his medical degree from the Faculty of Medicine University of Rome, Italy, in 1936 and his New Jersey license in 1938. A lifelong resident of Newark, Dr. Albano had his private surgical practice there for 50 years. In addition, Dr. Albano was a staff physician at Columbus Hospital, Newark, and at Clara Maass Medical Center, Belleville. Dr. Albano served in the United States Army during World War II and was a retired National Guard colonel. Dr. Albano also was a member of the American College of Emergency Physicians and of the American Association of Military Surgeons.

Robert P. Boyd. Word has been received of the death of Robert Peterson Boyd, MD, on February 5, 1990, of heart problems. A member of our Union County component, Dr. Boyd was a general practitioner, affiliated with Muhlenberg Regional Medical Center, Plainfield. Born in 1904 in Chicago, Illinois, Dr. Boyd was awarded his medical degree from Temple University Medical School, Pennsylvania, in 1936. He completed an internship and residency at Muhlenberg Regional Medical Center, Plainfield, and from 1943 to 1947 served in the medical corps as a major. Dr. Boyd was a member of the American Medical Association.

Anthony Fernicola. At the age of 72, retired urologist Anthony Ralph Fernicola, MD, died on January 29, 1990. Dr. Fernicola had practiced in Newark since 1950, retiring in 1987. During his tenure, he was president of the medical staff of St. James Hospital and was an attending urologist at St. James and Columbus Hospitals, both in Newark, and at Clara Maass Medical Center, Belleville. Dr. Fernicola was the pioneer physician for the operative procedure, retrospective prostatectomy, and established urological entities related to infection, obstruction, and tumor of the genitourinary system. Dr. Fernicola was a member of our Essex County component and of the American Medical Association; he was a diplomate of the American Board of Urology; and a fellow of the American College of Surgeons and of the Academy of Medicine of New Jersey. He was a published writer of numerous articles and a member of the American Medical Writers Association, and was a winner of the New York Urological Society Prize Essay. Born in 1917 in Newark, Dr. Fernicola earned his medical degree from Georgetown University Medical School, Washington, DC, in 1945, and received his New Jersey medical license the following year. He served a residency and internship in urology at Newark City Hospital.

Cleo J.L. Froix. A member of our Camden County component, Cleo Joseph L. Froix, MD, died on February 6, 1990. Born in 1919 in Trinidad, West Indies, Dr. Froix received his medical degree from Howard University College of Medicine, Washington, DC, in 1953. He completed an internship at Kings County Medical Center, New York, and a surgical residency at Harlem Hospital, New York, and at Godfrey Hospital, Paris, France. Licensed in Maryland, New York, and Hawaii, Dr. Froix relocated to New Jersey in 1987 after receiving his medical license. Dr. Froix was a fellow of the

IN MEMORIAM

Please send all information for member obituaries to the following address:

Membership Department
NEW JERSEY MEDICINE
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American College of Surgeons and of the American Society of Abdominal Surgeons; a diplomate of the Pan American Medical Association; and a member of the American Medical Association.

Vincent J. McAuliffe. Teaneck pediatrician for 40 years, Vincent Joseph McAuliffe, MD, died on February 24, 1990, at the age of 74. Born in Jersey City, Dr. McAuliffe earned his medical degree from Georgetown University School of Medicine, Washington, DC, in 1942; he obtained his license to practice in New Jersey the following year. After completing his pediatric residency at Children's Hospital in Washington, DC, Dr. McAuliffe moved to Teaneck in 1948. During his lengthy career, Dr. McAuliffe served as chief of pediatrics and as president of the medical staff at Holy Name Hospital, Teaneck. Dr. McAuliffe was a member of our Bergen County component and of the American Medical Association; he was a fellow of the American Academy of Pediatrics; and he was a diplomate of the American Board of Pediatrics. During World War II, Dr. McAuliffe served as a United States Army captain.

Ramiro Mireles. At the age of 61, Ramiro Mireles, MD, a member of our Union County component, died on February 2, 1990. Born in Mexico, Dr. Mireles earned his medical degree from Universidad de Nuevo Leon, Monterre, Mexico, in 1951. He then moved to Hillside, and practiced in Elizabeth as a general surgeon and gynecologist, until his death. During his career, Dr. Mireles was affiliated with St. Elizabeth Hospital, Alexian Brothers Hospital, and Elizabeth General Medical Center, all in Elizabeth. Dr. Mireles was a member of the American Medical Association and of the Pan American College of Surgeons, and a fellow of the American College of Surgeons.

Louis Rosenberg. Word has been received of the death of a retired member of our Atlantic County component, Louis Rosenberg, MD. Born in 1903 in Atlantic City, Dr. Rosenberg earned his medical degree at Jefferson Medical College, Pennsylvania, in 1926; the following year he was awarded his New Jersey medical license. For over 50 years, Dr. Rosenberg practiced in Atlantic City, with a specialty in circulatory diseases. He was affiliated with Atlantic City Medical Center and served as president of the Atlantic County Medical Society; he was a member of the American Medical Association and a fellow of the American College of Angiology. Dr. Rosenberg retired from the practice of medicine in 1977. From July 1942 to 1946, Dr. Rosenberg served in the U.S. Medical Corps as a major.

Francis U. Seiler. Francis Ulric Seiler, MD, of Robbinsville and a member of our Mercer County component, died on February 22, 1990, at the age of 67. Born in 1922 in Trenton, Dr. Seiler earned his medical degree from Hahnemann Medical School, Philadelphia, in 1947. Dr. Seiler served an internship at St. Francis Medical Center, Trenton, from 1947 to 1948, and completed a residency in obstetrics/gynecology at Tampa Municipal Hospital, Florida, in 1949; at Aultman Hospital, Canton, Ohio, in 1950; and at Columbia Hospital, Washington, DC, in 1953. In July 1953, Dr. Seiler opened a private practice in obstetrics/gynecology, and was affiliated with St. Francis Medical Center. Dr. Seiler was a fellow of the American College of Obstetrics/Gynecology and of the American College of Surgeons. Dr. Seiler retired from active practice in 1983.

Arthur C. Tutela. At the age of 80, Arthur Constantine Tutela, MD, a member of our Essex County component, died on January 10, 1990. Born in Newark, Dr. Tutela was awarded his medical degree from Loyola University Medical School, Illinois, in 1938. After serving an internship at Saint Michael's Medical Center, Newark, Dr. Tutela received his license to practice in New Jersey in 1939. Dr. Tutela was a physician in Short Hills and Newark for 50 years; he was affiliated with Saint Barnabas Medical Center, Livingston, and Saint Michael's Medical Center and Columbus Hospital, both in Newark. A general physician, Dr. Tutela was a member of the American Medical Association and a fellow of the Academy of Medicine of New Jersey. Dr. Tutela served as a captain in the Army during World War II and received a Purple Heart and the Bronze Star for action in the Battle of the Bulge.

William Weissberg. Elizabeth physician William Weissberg, MD, died on January 13, 1990, at the age of 75. Born in Newark, Dr. Weissberg earned his medical degree at Cincinnati Medical College, Ohio, in 1939. He served an internship at Elizabeth General Hospital and a residency at Bronx Hospital, New York. Dr. Weissberg, an internist, was founder and partner of the Elizabeth Medical Group for 40 years. During his lengthy career, Dr. Weissberg was affiliated with St. Elizabeth Hospital, Elizabeth General Medical Center, and Alexian Brothers Hospital, all in Elizabeth. Dr. Weissberg was a diplomate of the American Board of Internal Medicine, a fellow of the American College of Physicians, and a member of our Union County component and of the American Medical Association. During his tenure at Elizabeth General Medical Center, Dr. Weissberg was president of the medical board and of the clinical society. During World War II, Dr. Weissberg served as a major in the medical corps of the Army in the Pacific Theatre.

NEWSWATCH

"CLEAR AND CONVINCING" EVIDENCE BILL RELEASED FROM COMMITTEE

The Senate Committee on Institutions, Health and Welfare released S-2608 from Committee on May 17, 1990. The bill elevates the burden of proof to "clear and convincing" in medical licensing actions. That standard was recommended to the Legislature by Herbert S. Stern, Esq., special counsel to MSNJ, as being both prudent and fair. Senate approval is expected before the summer recess.

MALPRACTICE SURCHARGE SUIT

MSNJ's suit against the State Department of Insurance will be argued before the Appellate Division in September if the Court maintains its schedule. MSNJ and MIIENJ have filed briefs and the State has not done so; the Court granted an extension due to illness and personal scheduling difficulties of the deputy attorney general representing the DOI.

REQUEST PIP ARBITRATION IF THE CARRIER DOES NOT PAY

Many physician have had their fees reduced or denied by automobile carriers. If you are displeased by such actions, you should notify the carrier in writing that you are requesting arbitration under the PIP statute and use an arbitrator from the American Arbitration Association list. A copy of your arbitration request should be sent to Vincent A. Maressa at the Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648.

MSNJ NEWSLETTER

RADIOLOGY ROUNDS/REVIEW

With this issue of *NEW JERSEY MEDICINE,* we welcome bimonthly columns entitled, "Radiology Rounds" and "Radiology Review." The format will include a radiograph and clinical issue, as well as a brief discussion and diagnosis; selected references will be noted. Contributions for this column are welcome, and guest editors Drs. Jacoby and Zeiger invite participation. We know these two columns will be a valuable addition to our state medical journal.

MEDICARE COST SHIFT

The Department of Health has issued proposed changes to the 1990 Medicare Cost Shift Methodology for the July 1990 calculations. The proposed methodology covers: Part B physician costs, updates of Medix UB data, and treatment of PPS excluded units. Blue Cross will use 1988 Medicare cost report data to remove Part B physician costs from the Chapter 83 portion of the calculations and exclude these costs from the Medicare payment portion. Data from 1989 may not be complete in time for inclusion in the calculation, so the Department proposes to use the 1988 UB data used in the January calculations. This data will be updated for additional cases, corrections to DRG assignments, and separation of same-day medical cases. The Department anticipates contacting hospitals that have PPS excluded units to determine whether these units are included in the hospitals' 1990 Chapter 83 rates. If they are included in their rates, the Department intends to include Medicare payments for these units in the cost shift calculation.

BLUE CROSS PREMIUM REVISIONS

The 350,000 individual Blue Cross and Blue Shield policyholders will soon receive revised rates after the state Insurance Department ordered the insurer to set rates without regard to demographics. The order was issued in response to an Appellate Division of Superior Court ruling that found it illegal for Blue Cross and Blue Shield, as a tax-exempt carrier, to set rates based on age, gender, or residence. The revised rate schedule does not apply to the 250,000 senior citizens with supplemental Medicare policies, or to student health policies. Blue Cross and Blue Shield officials fear that, as a result of the ruling, it will continue to lose low-risk customers to commercial insurance carriers that are able to reject high-risk applicants, and provide low-risk applicants with better rates.

NURSING SHORTAGE

The New Jersey Hospital Association has reported that the shortage of nurses in New Jersey has improved in 44 percent of hospitals that responded to a survey. The Association also reported that the statewide average nursing position vacancy rate was 17 percent in 1989, the same vacancy rate reported for 1987. The 23 percent of hospitals that reported increases in the vacancy rate, for the most part, were inner-city hospitals, or hospitals bordering neighboring states.

PRO REPORT CRITICISMS

The Institute of Medicine (IOM) released their report on their study of PROs, mandated by the 1986 Consolidated Omnibus Budget Reconciliation Act. The report indicates that PROs spend too much time focusing on cost and utilization rather than the quality of patient care. The report recommends changing the existing PRO program into a "Medicare Program To Assure Quality." This program would gather data on obtaining the most appropriate types of care for patients and provide patients with more information. Gail R. Wilensky, HCFA administrator, said HCFA does not agree with IOMs suggestions for a new advisory type program. Wilensky commented that HCFA currently is gathering data to help the PRO program "change from the review of individual case records to the monitoring of practice patterns and outcomes of care."

ELDERLY HEALTH COSTS A report released by the House Select Committee on Aging reports that the elderly's annual out-of-pocket costs for health care have increased from $700 per capita in 1977 to $2,400 per capita in 1988. Committee Chairman Edward R. Roybal (D-CA) estimates that unless the government intervenes, out-of-pocket health care costs soon will consume 20 percent of the elderly's limited income. This Committee is continuing its investigation of insurance sold to the elderly to cover health care costs and the related sales methods employed and commissions generated.

NATIONAL HEALTH PLAN A study performed by the National Center for Policy Analysis, Dallas, found that if the U.S. implements a national health insurance plan, manufacturers would see their health care costs increase by 50 percent; such a plan would require, at a minimum, $339 billion in new taxes.

PROSPECTIVE CAPITAL PAYMENTS HCFA Administrator Gail Wilensky reaffirmed Health and Human Services (HHS) intent to establish a prospectively based hospital capital payment system. She urged hospital industry participation in the discussion process so that comments could be considered in the proposed capital rule expected to be published late this summer. Federal law requires capital payments to be incorporated into PPS payments by October 1, 1991. Earlier efforts to establish prospective capital rates in 1987 and 1988 were stalled by Congress. Indications are that the 1987 capital payment plan would be the basis for current proposal deliberations. That plan featured varying transition periods for incorporating fixed and movable capital costs, adjustments for urban and rural classification, and sole community provider exemptions. Medicare currently reimburses acute hospital inpatient capital expenses at 85 percent of reasonable costs. The Administration's 1991 budget proposal provides for further reduction to 75 percent for urban hospitals and 85 percent for rural hospitals.

AMA REFORM PLAN The AMA has presented a broad health care reform proposal recommending substantial changes in Medicare, Medicaid, and employer-purchased health insurance. The plan is designed to improve access to high-quality, affordable health care services. The reform proposal recommends building on the strengths of the current health care system, including: changing the current professional liability system; establishing provider-developed practice parameters; strengthening Medicare trust fund balances by prefunding; establishing state risk pools to provide group health coverage for the uninsured and requiring national standard health benefits as opposed to more costly individual state-mandated benefits.

NURSING HOME SCREENINGS HCFA has proposed a rule that requires nursing homes to screen all residents for retardation and mental illness. Homes that do not comply risk exclusion from the Medicare and Medicaid programs.

ANTITRUST VIOLATIONS The AMA's Physician Negotiation Advisory Office is ready to help you bargain with HMOs, insurance companies, and other third-party payers. This AMA service can boost your negotiating power and answer your questions about antitrust laws. The AMA has a telephone "hotline" to field your questions on the subject. Just call 312/645-5601. A referral list of attorneys experienced in antitrust also is available. As an AMA member, you can receive a free booklet called "Collective Negotiation and Antitrust," by writing to: Physician Negotiation Advisory Office, AMA, 535 North Dearborn, Chicago 60610. Attention: Michael He, JD, or call 312/645-5601.

CDC GUIDELINES

Potential exposure to HIV and other blood-borne pathogens is a risk every physician faces. After reviewing all the proposed standards for protecting health workers from exposure, the AMA concluded that the Centers for Disease Control's guidelines present the best methods of preventing occupational transmission. The AMA testified to that effect before the Occupational Safety and Health Administration (OSHA). In addition, the AMA urged OSHA to train enough field staff to conduct infection control inspections without disrupting the delivery of quality care.

GROUP PRACTICE

If you practice in a large group or are employed by an HMO, you should know that the AMA has created a Department of Group Practice Physicians. This department will serve as your direct link to the AMA when you need representation on payment reform, regulatory issues, and referral problems. A Committee on Group Practice Physicians has been formed, made up of members from leading clinics throughout the country. The Committee will meet to advise the AMA on policy and to develop programs that meet your needs.

APPLICATIONS FOR CDS

There is a delay in sending out renewal applications for CDS registrations that expired on March 31, 1990. Likewise, there may be a delay in subsequent renewal periods until the transition from a manual system to an automated one is in place. Those practitioners whose registrations expired on December 31, 1989, or prior to that date should be able to provide copies of their renewal applications to indicate that they have fulfilled their obligations in returning the renewal form. The copy of the renewal application should have the blocks on the lower right-hand side completed with the check number, date of check, and the amount of $20.

SCREENING PARAMETERS

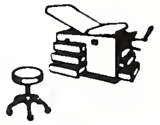
The Health Care Financing Administration (HCFA) has become aware of individuals offering physicians the opportunity to purchase the HCFA-mandated medical review screening parameters. This information has not been provided by HCFA or an agent of HCFA. This information may not be accurate and these parameters are subject to ongoing revision. Please remember that information in publications issued from sources other than Pennsylvania Blue Shield or HCFA is not considered official notice from your Medicare Carrier. Pennsylvania Blue Shield informs physicians and suppliers of Medicare Program provisions via *Medicare Report,* Medicare special bulletins, special mailings, and stuffers inserted with their Explanation of Medicare Benefits. It is important that physicians recognize these forms of Pennsylvania Blue Shield communications as their official notice of Medicare Program provisions, policies, and billing procedures.

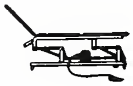
MEDI-FILE CARDS

The Medical Society of New Jersey, in cooperation with the Medical Society of New Jersey Auxiliary, is making a file card available for physician distribution to their patients. This card is a record of all the medications the patient currently is using. It also lists any known allergies and other pertinent medical information. The Auxiliary has been distributing these as a doctor/patient service, and copies may be obtained from the Public Relations Department, MSNJ, 609/896-1766.

FINI

"No man was ever wise by chance." ☐





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LEVOXINE® *(Levothyroxine Sodium Tablets, USP)* For oral administr

The following is a brief summary. Before prescribing, please consult package inse

INDICATIONS AND USAGE:

LEVOXINE (L-thyroxine) tablets are indicated as replacement or supplemental the for diminished or absent thyroid function, resulting from functional deficiency, pri atrophy, from partial or complete absence of the gland or from the effects of sur radiation or antithyroid agents. Therapy must be maintained continuously to contr symptoms of hypothyroidism.

CONTRAINDICATIONS:

L-thyroxine therapy is contraindicated in thyrotoxicosis, acute myocardial infar and uncorrected adrenal insufficiency.

WARNINGS:

> Drugs with thyroid hormone activity, alone or together with other therapeutic agents, h been used for the treatment of obesity. In euthyroid patients, doses within the range of d hormonal requirements are ineffective for weight reduction. Larger doses may prod serious or even life-threatening manifestations of toxicity, particularly when given in sociation with sympathomimetic amines such as those used for anorectic effects.

PRECAUTIONS:

Caution must be exercised in the administration of this drug to patients with cardi cular disease. Development of chest pains or other aggravation of the cardiovascula ease requires a reduction of dosage.

Patients on thyroid preparations and parents of children on thyroid therapy shou informed that replacement therapy is to be taken essentially for life. They shoul mediately report during the course of therapy any signs or symptoms of thyroid horn toxicity, e.g., chest pains, increased pulse rate, palpitations, excessive sweating, intolerance, nervousness, or any other unusual event. In case of concomitant diab mellitus, the daily dosage of antidiabetic medication may need readjustment. In ca concomitant oral anticoagulant therapy, the prothrombin time should be measure quently to determine if the dosage of oral anticoagulants is to be readjusted.

Partial loss of hair may be experienced by children in the first few months of th therapy, but this is usually a transient phenomenon and later recovery is usuall rule.

Drug Interactions — In patients with diabetes mellitus, addition of thyroid horn therapy may cause an increase in the required dosage of insulin or oral hypoglyc agents.

Patients stabilized on oral anticoagulants who are found to require thyroid repl ment therapy should be watched very closely when therapy is started.

Cholestyramine binds both T_4 and T_3 in the intestine, thus impairing absorpti these thyroid hormones. Four to five hours should elapse between administrati cholestyramine and thyroid hormones.

Estrogens tend to increase serum thyroxine-binding globulin (TBg). Patients with functioning thyroid gland who are on thyroid replacement therapy may need to incr their thyroid dose if estrogens or estrogen-containing oral contraceptives are give

Drug/Laboratory Test Interactions — The following drugs or moieties are known to i fere with laboratory tests performed on patients taking thyroid hormone: androgens, ticosteroids, estrogens, oral contraceptives containing estrogens, iodine-contai preparations, and the numerous preparations containing salicylates.

Carcinogenesis, Mutagenesis, And Impairment of Fertility — A reported apparen sociation between prolonged thyroid therapy and breast cancer has not been confir No confirmatory long-term studies in animals have been performed to evaluate cinogenic potential, mutagenicity, or impairment of fertility in either males or fema

Pregnancy-Category A — The clinical experience to date does not indicate any adv effect on fetuses when thyroid hormones are administered to pregnant women.

Nursing Mothers — Minimal amounts of thyroid hormones are excreted in human Thyroid is not associated with serious adverse reactions and does not have a kn tumorigenic potential. However, caution should be exercised when thyroid is adm tered to a nursing woman.

Pediatric Use — The incidence of congenital hypothyroidism is relatively high. Ro determinations of serum (T_4) and/or TSH is strongly advised in neonates in view o deleterious effects of thyroid deficiency on growth and development.

ADVERSE REACTIONS:

Adverse reactions are due to overdosage and are those of induced hyperthyroidis

OVERDOSAGE — Excessive dosage of thyroid medication may result in sympton hyperthyroidism, which may not appear for one to three weeks after the dosage regi is begun. The most common signs and symptoms of overdosage are weight loss, pal tion, nervousness, diarrhea or abdominal cramps, sweating, tachycardia, cardiac a thmias, angina pectoris, tremors, headache, insomnia, intolerance to heat and fev symptoms of overdosage appear, discontinue medication for several days and reins treatment at a lower dosage level.

Complications as a result of the induced hypermetabolic state may include ca failure and death due to arrhythmia or failure.

Dosage should be reduced or therapy temporarily discontinued if signs and symp of overdosage appear.

Treatment of acute massive thyroid hormone overdosage is aimed at reducing trointestinal absorption of the drugs and counteracting central and peripheral eff mainly those of increased sympathetic activity. Measures to control fever, hypoglycem fluid loss should be instituted if needed.

DOSAGE FORMS AVAILABLE:

LEVOXINE (L-thyroxine) tablets are supplied as oval, color coded, potency ma tablets in 11 strengths: 12½ mcg (0.0125 mg) - maroon, 25 mcg (0.025 mg) - ora 50 mcg (0.05 mg) - white, 75 mcg (0.075 mg) - purple, 100 mcg (0.1 mg) - yellow, 112 (0.112 mg) - rose, 125 mcg (0.125 mg) - brown, 150 mcg (0.15 mg) - blue, 175 (0.175 mg) - turquoise, 200 mcg (0.2 mg) - pink and 300 mcg (0.3 mg) - green, in bott 100 and 1000, and unit dose in cartons of 100 (10 strips of 10 tablets), 200 mcg 500 mcg injectable (see injectable package insert).

PROFESSIONAL LIABILITY

DATA BANK GETTING READY

It still is uncertain just when the National Practitioner Data Bank will begin operation. An invitational conference in Chicago for those who must routinely submit information made one thing very clear: there are still many unanswered questions and problems yet to be resolved. The job of obtaining and storing data from literally thousands of insurers, state licensing boards, professional organizations, hospitals, and physicians is formidable enough. Coping with what could be hundreds of thousands of inquiries will be a staggering task.

By law, insurance companies, self-insured hospitals, and self-insured physicians and dentists on whose behalf payments resulting from malpractice claims or judgments are made must report such information to the Data Bank. State medical and dental boards, and other organizations and entities also must report actions affecting clinical privileges or society membership that are based on a practitioner's professional competence or conduct.

Reports must be filed within 30 days of an action, but even here there are many "what ifs?" For example, at what point does a privilege or licensure action become final and thus reportable? What should be done about a practitioner who voluntarily enters a drug or alcohol rehabilitation program before an action can proceed?

Refer to the regulations, published in the October 17, 1989, *Federal Register,* and do your own legal work on such questions, suggested HHS spokespersons.

It also is mandatory that every hospital query the Data Bank every two years regarding physicians, dentists, and other health care practitioners on their medical staffs or those to whom they have granted clinical privileges. Similarly, hospitals must query the repository when they are considering a new applicant for a medical staff appointment or clinical privileges.

Considering that there are more than a half million practicing physicians and thousands of dentists, simple arithmetic suggests that a monumental amount of information will be accumulated and divulged.

Now add a new dimension to this process. Insurers were told at the December 1989 conference, they could ask physicians or dentists applying for liability coverage to provide copies of their Data Bank reports with their applications.

"This could generate an additional 500,000 requests for information from insurers about physicians," noted Larry Smarr, vice-president for statistics and research, Pennsylvania Medical Society Liability Insurance Company.

Daniel D. Cowell, MD, director of the Division of Quality Assurance and Liability Management, Public Health Service/Department of Health and Human Services, reported on Data Bank progress. "We are seeking your support in developing an active partnership to make the Data Bank work," Dr. Cowell said. He admitted that there still are many concerns—access, security, and confidentiality among them—but said, "There is no way we could dispel them all." Dr. Cowell said his people were "adhering to a neutral path." He urged, "Let it work. It could reflect very favorably upon the medical profession."

Dr. Cowell then explained the basic data elements that must be provided, including a medical malpractice payment report, an adverse action report, and a licensure, privileges, or membership action. He also described the information required when an entity requests data.

The biggest problem for those attending was that the actual forms are not yet ready and still must clear the Office of Management and Budget. "We do not know what the form looks like. Until we do, we cannot tell what kind of additional programs we will need," said James Robb, vice-president, claims operations, Medical Liability Mutual Insurance Company of New York.

"Conforming with the Data Bank requirements affects our day-to-day operations. It impacts very dramatically on how insurers operate. We are unsure of what rules we play under," Smarr said.

As the day progressed, it became obvious HHS staffers were in something of a tough spot, trying to conform with a legislative mandate, while having to get confirmation for decisions from other government agencies, such as Office of Management and Budget. Some tempers began to fray as questions revealed yet-unresolved problems.

State licensing board representatives, for example, were dismayed to learn that no information will be available on a doctor from another state applying for licensure in 30 days. "That is a real time frame problem for us," said one such representative.

"There are a lot of unanswered questions after today's meeting," commented a St. Paul representative. "There needs to be some consensus before we try to educate our people about the Data Bank."

Conferees did clarify some points: sealed judgments must be reported; defense costs need not be included in payment reports; security for the Data Bank will be very tight; and that only authorized individuals and entities will be able to extract data.

Somewhat veiled references in new regulations to "expansion" of the Data Bank also raised red flags to some attendees. Dr. David Masland, Carlisle, PA, newly appointed to the executive committee for the Data Bank, said he would argue strongly against the concept of extending the database.

Throughout the day, speakers stressed that no link between the reporting of a claim or judgment can be made with the quality of a practitioner's services or competence. Nevertheless, these same speakers were firm in saying that the Data Bank will go forward, regardless of reservations or reluctance on the part of those the law touches. (Reprinted with permission from *Medical Liability Monitor,* Winnetka, IL, 60093. January 24, 1990, Volume 15, Number 1)

DELAY DATA BANK OPENING; QUESTIONS PERSIST

Startup delays again have postponed the opening of the National Practitioner Data Bank to which all medical malpractice indemnity payments and other actions affecting licensure or hospital privileges must be reported. For several months, insurers and reporting agencies have been trying to get a handle on the specific requirements they must fulfill and how to meet them. Many liability insurers still are frustrated, despite several meetings conducted under Data Bank auspices to try to explain the procedures.

Many insurers say the big stumbling block is the fact that the actual forms to be used in submitting information with full instructions have not yet been officially cleared by the Office of Management and Budget. Word is that after several meetings at which insurers raised specific questions, several substantive changes in the forms are being considered.

Several information meetings already have been held, including one in Chicago in December and one for commercial insurers held in New Orleans in February. At the request of the Physician Insurers Association of America (PIAA), another meeting was held in late February in Phoenix. Principal speakers at the Phoenix meeting, attended by nearly 100 PIAA and other representatives, were John E. Hansan, PhD, Data Bank director, and education manager Mindy C. Reiser, PhD, both of UNISYS, which has been awarded the contract to operate the repository. However, no representatives from the Division of Quality Assurance and Liability Management of the Department of Health and Human Services, which has been delegated to oversee Data Bank operations, were present; still-unaddressed policy issues could not be resolved.

Lawrence E. Smarr, vice-president of statistics and research for Pennsylvania Medical Society Liability Insurance Company, who has been closely following the technical side of Data Bank operations, said that many of the PIAA company representatives came away still dissatisfied about unanswered questions, "even such simple ones as whether or not the Data Bank will accept return receipt requested mail." Insurers say they are willing to supply data to the bank, mandated in the Health Care Quality Improvement Act of 1986, even though it will be time-consuming and expensive, but are stymied over the nuts-and-bolts aspects of meeting their obligations.

St. Paul Fire & Marine Insurance Co., the largest commercial professional liability carrier, says it has had a task force in place for some time trying to coordinate various aspects of its involvement in the new Data Bank. "We have been considering how we can comply with the statutory requirements, but there still are unanswered questions," stated Tim Morse, vice-president of St. Paul's medical services division.

Divergence of coverage poses special problems for the big carrier, Morse said. Although there are many first-dollar insureds, there also are a growing number of customers with significant retentions. In such situations, reporting requirements become complicated.

"We are educating our own people and our own insureds. We are sending a brochure to all our insureds explaining the Data Bank, our obligations to it, and assuring them that we are going to do what we can to protect the confidentiality and integrity of the claims files," Morse said.

Coordinating with the 35 claims service centers and other offices who will be responsible for making the appropriate filings to both the Data Bank and the appropriate licensing agencies will take time and effort, "and that translates into dollars," Morse noted. He said the company will make itself available to health care providers when data submitted is entered and then sent to the providers to check accuracy.

Morse said the company had no plans to ask potential insureds to provide copies of any Data Bank entries about them. (Reprinted with permission from *Medical Liability Monitor,* Winnetka, IL 60093. March 30, 1990, Volume 15, Number 3)

TOWARD 2000 VI SYMPOSIUM

October 12th and 13th.

The sixth annual Toward 2000 Symposium is an opportunity to assess progress toward the goal of reducing cancer mortality in the United States. The symposium will be held at Fox Chase Cancer Center on October 12th and 13th. National experts will conduct seminars, workshops and informal dinner discussions focusing on common solid malignancies including lung, colon, and breast. Faculty will also discuss advances in autologous bone marrow transplantation and the role of immunotherapy.

For more information and hotel accommodations, please contact Kathy Smith or Louise Blasick at (215) 728-2715.

As an organization accredited by the Accreditation Council for Continuing Medical Education, Temple University School of Medicine certifies that this program meets the criteria for 12 credit hours of Category I, provided it is completed as designed.

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EDITOR'S DESK

TOO MANY COOKS

Do physicians follow a medical career merely to insure a comfortable life? In olden days, comfort was expected and physicians did not expect to get rich, but the moderate degree of comfort was complemented even more by the twin towers of prestige and individualism—the ability of the individual to make decisions, after weighing all the information deemed necessary, by due and deliberate cogitation.

The prestige once granted by society to the physician continues to erode, as shown by Paul Starr and others. People who put us on pedestals are surely, and not slowly, lowering us, ably abetted by the sensation-seeking, thought-rejecting press and film. As a result, the erstwhile recommendation to an aspiring princess to marry a doctor, or, even better, to have one for a father, no longer pertains. In today's world, the doctor may well be a woman, a situation long overdue. The doctor's hours can be long and unpredictable; parents with nice businesses can give longer and better quality hours to their children. In the acquisition-minded decade of the 1980s, there were easier ways to make big bucks than in medicine. And government in the decade of the 1990s seems poised to place a cap on all types of physician income.

We may not be able to act as individualistically as in the past, but at least we shall retain the ability to make the final decisions—to treat or not to treat, how to treat, and when to treat. Right? Sorry! In addition to the pressures we have been enduring from insurance companies and government regarding length of stay and appropriateness of care, we soon are to be further shackled by members of our own profession, who will establish the cookbook of medicine—the recipes that are intended to turn practitioners into medical escoffiers, but are more likely to produce short-order cooks.

Medicine has long been recognized as both an art and a science, travelled along many parallel, but separate, paths toward proper diagnosis and treatment. Many differences also develop between the specific and the general. It has been shown that general principles of investigation or treatment often are bent or fractured when dealing with individual patients, sometimes by omitting and sometimes by adding too broad recommendations. These differences in approach are striking, significant, and reproducible and suggest that medicine, as practiced by reasonable physicians, demands flexibility.

We used to have criteria of care for hospital admission, inhospital care, and discharge. These criteria employed during the almost-forgotten days of cost-plus accounting were abandoned quietly and quickly when the screws of cost-containment began to turn. (Can you imagine that once—not long ago—we required that postoperative hernia patients were afebrile and that all body functions, including bowel, had returned to normal before discharge was considered appropriate?)

Yours truly once was privileged to debate many of the reports of the AMA's Council on Scientific Affairs at reference committee hearings and on the floor of the House of Delegates. Despite disclaimers appended to each accepted report, intended to act as a brake against unwarranted use of the standards in litigation, there was great worry about this possibility. This worry certainly has deepened through the years. One shall have even more concern when one notes some of the reports were adopted as AMA policy by bare majority vote—just enough to plant a policy into plaintiff's fields of endeavor. We have been reassured that standards or parameters of care should not impose additional and unreasonable burdens on defendant physicians and may even decrease the vagaries of jury response. So saith the AMA and its legal counsel. Those of you who agree with this assessment please write; somehow we do not expect to be overwhelmed by responses.

Algorithms are helpful. Computer analyses are helpful. Bright physicians practicing both the art and the science of medicine for the benefit of their patients certainly can use modern techniques to aid their deliberations. But standards or parameters proposed by government and organized medicine can boobytrap even the most caring physician. They will certainly be used by government, by its contracted review agencies, e.g. PROs, and by plaintiffs and their legal representatives. All of these groups love statistics and love its attendant publicity. The physician, already overburdened by bureaucratic paperwork, will have a choice—be innovative and face additional sanctions and legal expenses, or become a cookbook doctor. If enough follow the second course, we may enter the age of robotic medicine, especially for those who exhibit few or no procedural skills. For them, the RBRVS may have to develop downgraded fees, their cognitive skills having been so eroded by the blind following of recommended recipes that they are treating by the numbers.

"The discovery of a new dish does more for the happiness of mankind than the discovery of a star."

Anthelme Brillat-Savarin, Physiologic du goût (1825)

BOOK REVIEWS

ALLERGY AND ASTHMA: NEW TRENDS AND APPROACHES TO THERAPY

A.B. Kay (ed). London, England, Blackwell Scientific Publications, 1989. Pp. 277. The book brings together the rapid development of new forms of therapy for bronchial asthma and other atopic disorders (IgE-mediated) that are among the most active areas of medical research today. The organization of the text has been developed to advance the traditional treatment approaches, i.e. allergy and avoidance, antiallergic drugs, and immunotherapy. The first section details the formation of actual lipid mediators and their inflammatory involvement in allergic responses. This section goes on to devote an entire chapter to the pharmacological modulation of IgE-mediated generation and the allergic response by the famous 'omega' (fish oil diets). The second section delineates the process for modulation of the specific immune response in allergic disorders, and provides further analysis of the possibility of suppressing the IgE response with various types of proteins developed by biotechnology, e.g. suppressive factor of anaphylaxis. In part three, specific medications that suppress inflammation are discussed, such as cetrizine, a selective Hl antagonist that affects various inflammatory cells, specifically eosinophils; the long-lasting azelostine, a compound with multiple modes of action; and nedocromil sodium, an antiasthmatic drug with steroid sparing effects.

The book does accomplish its goal in developing a rational approach in the new trends and approaches in allergy and asthma therapy and should be of interest to allergists/immunologists, pulmonologists, internists, and family practitioners interested in IgE-mediated disorders. ☐ Leonard Bielory, MD

CECIL ESSENTIALS OF MEDICINE

Thomas E. Andreoli, MD. W.B. Saunders Company, Philadelphia, PA, 1990. Dr. Thomas E. Andreoli, professor and chairman, Department of Internal Medicine, University of Arkansas College of Medicine, and chief of medicine, University of Arkansas Hospital, and other highly qualified medical editors have been responsible for this scholarly second edition. The text contains 12 major sections focused either on different organ systems or on disease groups sharing a common theme, such as infectious disease, neoplastic disease, or congenital diseases.

The name of Cecil on any textbook heading as editor, ever since the early part of this century, has been considered as a mark of excellence in editorial scholarship in the field of general medicine.

The attempt here was to renew and advance the efforts of the predecessor, *Cecil Textbook of Medicine,* in a succinct readable text, and to cover the important elements of the principles and practices of the broad field of internal medicine in a concise manner. Each chapter contains the latest available information and is complete with an index of timely, recent references.

Essentials does not intend to duplicate any other Cecil textbook but hopes to provide a core or summary for students of medicine during their undergraduate medical clerkships or in review preparation for examinations. *Cecil Essentials of Medicine, Second Edition* also is highly recommended for a place on every physician's desk, to replace older reference texts on similar subjects. ☐ Harry M. Poppick, MD

NUCLEUS OF CARDIAC DIAGNOSIS

William A. Schiavone. Philadelphia, PA, Lea & Febiger, 1990. This softcover book is a collection of vignettes garnered from the author's experience at the Cleveland Clinic. While the declared purpose is "to teach the utility of the electrocardiogram and the chest x-ray," the reader will find the brief case reports more amusing than instructive. Adorned by such sexy titles as "The Syncopal Secretary, Amply Endowed and the Effusive Nun," the selected cases deal with a variety of cardiac disorders in a superficial fashion. Conventional chest x-rays are nicely reproduced, but some of the electrocardiograms are difficult to interpret because of poor contrast.

This book, not intended for the experienced cardiologist or the serious student, does help to restore confidence in the diagnostic value of two readily obtained, noninvasive, and inexpensive tests. ☐ Edwin L. Rothfeld, MD

THE OCULAR FUNDUS

Manfred R. Tetz and David J. Apple. Philadelphia, PA, Williams and Wilkins, 1990. This book is an atlas that provides high-caliber documentation of most common and some rare retinal and fundal diseases. The photographs are accompanied by case reports, many of which show sequential changes during the course of the disease. The descriptions of numerous retinal diseases are concise and easily understood, that along with good photographs aid in the comprehension of these conditions. Those capable of using an ophthalmoscope will find recognition of retinal diseases can be simplified by studying and using this book as a guide.

There also is an excellent bibliography for those interested in reviewing the subject. ☐ Alfonse A. Cinotti, MD

TUBAL RECONSTRUCTIVE SURGERY

Ginter Sotrel. Philadelphia, PA, Lea & Febiger, 1990. Medical science has risen to the challenge posed by the near epidemic of sexually transmitted diseases (STD) that have damaged Fallopian tubes and compromised the fertility of increasing numbers of young women by discovering new instruments and techniques designed to correct the damage.

Doctor Sotrel, with contributions from three colleagues affiliated with Boston University School of Medicine, has presented a comprehensive textbook covering all aspects of reconstructive surgery, including thorough explanations and excellent illustrations. At first glance, this book might seem valuable only to those gynecologists interested in reconstructive tubal surgery, but after more careful perusal it is obvious this book will be valuable to every primary care physician encountering patients eager to achieve a successful pregnancy after a bout or two of STD, ectopic pregnancy, and/or sterilization.

The sexplosion of the 1960s has reaped its harvest of increased infertility through more opportunities and more years to contract STD and has created increased numbers of second or prospective husbands eager for offspring from sterilized women. This book will enable clinicians to differentiate those patients with potentially correctable tubes from those patients who immediately should consider alternate methods of assisted conception. Although an indepth treatment of this latter subject is beyond the scope of this book, enough information is presented to the reader so that clinicians can intelligently advise patients of all of their options. This book is recommended without qualification. ☐ Jerome Abrams, MD, MPH

LETTERS & VIEWPOINTS

BABESIOSIS

I would like to thank Sandra W. Moss, MD, for her fine article, "Long Odyssey of Babesiosis," in the April 1990, issue of *NEW JERSEY MEDICINE*. It was especially timely for me because in August 1989, I admitted a patient to The Medical Center at Princeton with that very condition. Interestingly, she had contracted babesiosis while spending the summer in Nantucket, an endemic area for this parasite. This patient also had coexisting Lyme disease, a condition also endemic to Nantucket and carried by the same vectors.

I believe Dr. Moss's article also should be timely for other physicians in New Jersey because as we approach the summer months, when the tick vector for babesiosis is so active, we must all be aware that Nantucket, a favorite summer resort, is only a few hundred miles from our state. ☐ R. Michael Roberts, MD

WOMEN IN MEDICINE

The editorial in March 1990, "Hippocrates' Rib," would have been infinitely more constructive had the editor recommended women join both the American Medical Women's Association (AMWA) where they can enrich themselves personally, and the American Medical Association (AMA) where they can educate and sensitize male colleagues—physicians and editors—in order to achieve a truly equal partnership in medicine.

Unfortunately, many issues that are mainstream agenda items of AMWA and its New Jersey branch, have been relegated to the Committee on Women in Medicine of the Medical Society of New Jersey (MSNJ), and never find their way onto the MSNJ agenda. Having attended a number of the MSNJ trustees' meetings this past year in my capacity as president-elect of New Jersey Medical Women's Association (NJMWA), and having read MSNJ written materials and minutes, I note little concern about those societal issues that impinge on women's ability to participate in the practice of medicine.

For example, combatting sexual harassment could be a great goal for MSNJ. While NJMWA and the MSNJ Committee on Women in Medicine are planning to cosponsor a seminar, "Sexual Harassment in the Workplace," in September 1990, would it not be an appropriate and marvelous show of support to have a large attendance of male colleagues? Let MSNJ show its sensitivity by applying its resources to address this problem, to educate medical professionals who work in hospitals and offices to provide easily accessible avenues for female physicians (including students and residents) to register complaints with the Society and to obtain supportive action from your excellent legal consultants when needed.

Another associated problem for women physicians is discrimination in the workplace. Many women have experienced discrimination in overt and subtle ways—such as being denied professional opportunities in private practice and promotions in institutional hierarchies, being offered reduced salaries relative to men, or being excluded from the referral networks of their male colleagues.

Some students and residents with young families require child care facilities in order to pursue medical careers uninterrupted, during this age of dual-career families. MSNJ can use its influence to develop programs that address these needs in hospitals and other medical institutions.

Some women need alternative residency and work programs due to family needs. The medical profession and our patients would benefit greatly from the manpower and talent of those women who can supply services on a limited basis. Let residency and job opportunities for women be a mainstream agenda item for AMA and MSNJ. Show women that MSNJ is actively fighting discrimination. Extend our fight against discrimination to include other minority groups. Let us refocus organized medicine's concerns somewhat to consider these important social issues, and perhaps our profession will begin to appear more humane in the public eye as well.

Do not try to deny women the benefits of AMWA. Whereas male physicians meet and network at tennis, golf, and eating clubs, in the changing rooms of hospitals, and at organizational meetings, women have very little opportunity for professional and social networking. New Jersey Medical Women's Association provides a milieu for women to network, build friendships, share common experiences and problems, and develop leadership potential in our organization, whose agenda matches their own. Why should that threaten the AMA?

Show women physicians that MSNJ is not simply calling for their participation because of lagging membership but because of a sincere interest in their welfare. Many women belong to both organizations, and that is commendable. AMWA encourages its members to join and participate in AMA and relevant specialty societies. Pulling together, we can all be strengthened. ☐ Sandra Samuels, MD, President-Elect, New Jersey Medical Women's Association

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EDITOR'S REPLY

Dr. Samuels's letter is greatly appreciated. The issues she raises certainly warrant the most careful consideration by all in organized medicine. But there seems to be some misconceptions expressed in her letter about our attitudes and positions.

As we noted, participation in club-like activities does not give a person a vote in policymaking organizations: that is why we encourage greater participation in county and state medical societies and in the AMA. Women do not have to belong to either AMWA or the AMA—to one or the other; they are not mutually exclusive memberships. It also would be helpful for the members of MSNJ's Committee on Women in Medicine to participate more fully and in greater numbers, in order to punctuate the important issues sent to a most caring Board of Trustees.

We need the enormous potential of women to be tapped—not for "your" benefit, not for "our" benefit, but for the benefit of all of us, male physician, female physician, and the American public as a whole. We cannot waste this resource during these difficult times. ☐ Howard D. Slobodien, MD

LETTERS TO THE EDITOR

Letters to the editor-in-chief of *NEW JERSEY MEDICINE* are welcome. Communications should be sent to *NEW JERSEY MEDICINE*, the Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648. Style information is noted on page 509.

Inaugural Address

DOUGLAS M. COSTABILE, MD

Dr. Costabile, the 198th president of the Medical Society of New Jersey, presented this speech on Monday, May 7, 1990, at the 224th Annual Meeting of the Medical Society of New Jersey.

I would like to acknowledge those people who have served in this post in previous years and still are contributing to the work of this organization. That illustrious company includes Doctors Joseph Jehl, Nicholas Bertha, William D'Elia, James Rogers, John Madara, Charles Krueger, Alfred Alessi, Augustus Baker, Howard Slobodien, Alexander Kovacs, Frank Watson, Ralph Fioretti, Edward Schauer, Harry Carnes, Palma Formica, and Paul Hirsch. I have big shoes to fill.

Every year this body elects a new president and, every year, the individual receiving that great honor stands before you and tells you how he or she hopes to improve the climate in which we practice our profession.

Well, this year I'm the guy and I am no different than all the rest. I hope to improve the climate in which we practice because that is part of what the Medical Society of New Jersey is all about.

We, in all honesty, are here to protect an exposed portion of our anatomy. In that, we are no different from the AFL-CIO or the American Association of Manufacturers—with one notable exception.

Our profession is the profession of saving lives. That is what we do for a living. We bring babies into the world, we attempt to cure illness and overcome trauma, and, when necessary, we ease the pain of those we cannot cure.

Therefore, the nature of our profession is different and our ability to protect ourselves from the slings and arrows of outrageous fortune, to say nothing of federal and state regulation, is compromised.

We are blamed for lack of quality of our work as well as perceptions, often incorrect, relative to the lack of quality. We are blamed for the high cost of our work even though we do not garner all or even the largest portion of the profits of that work. Expectations are that (1) we should be able to prevent all illness; (2) that if anyone does become ill, we should be able to cure him with one office visit or, better yet, one house call; and (3) we should not charge for this service.

We are physicians, not magicians. We are mortals, not Merlins. As mortals, we do a difficult job—we do it well—we don't have to apologize for it and we don't have to apologize for making a decent living at it.

Sadly, there are those among us who are mercenary. They overcharge for what they do and they do things they shouldn't do. There are those among us who are incompetent. They are few and most of us have the intestinal fortitude to call them to account.

We get little credit for the good we do. In 1987, a study was done by the AMA and the American Hospital Association that showed that three out of five physicians provide care for the indigent and those lacking insurance coverage. Physicians devote an average of one-half day per week to the provision of charity care. Translated into dollars, the average physician forgoes $16,900 annually in net income to provide care for the poor.

Does it win you any medals? Absolutely not. Does the average patient know what you do for charity? Absolutely not. And if he were told, he wouldn't believe it. I told a patient of mine that three out of five doctors provide charity care and he asked me, "What about the other two guys?"

So if you are looking for a pat on the back, forget it. You do it and you will continue to do it for one reason only. It is the right thing to do.

Well, what else can we do about that anatomical exposure of which I spoke? We can improve our public posture by working on some aspects of our professional lives that upset our patients. Do you know what the number one complaint is that the average patient makes about his doctor—more often that the cost of treatment? It is being kept waiting at the office. What you are saying in effect to that patient or, at least, what he is hearing, is that I, the physician, am more important than you, the patient. My time is valuable—yours is not. They don't like that message and I don't blame them.

Now, we can do something about that. We can start our hours on time and make sure that our office staff doesn't overbook us. With some doctors, it's an ego trip to have a full waiting room. Are we so insecure that we need to do that?

For those inevitable delays, and they happen now and then, what is wrong with having your assistant explain to the patient that you are delayed and his appointment will be late? That is common courtesy and we don't practice it enough.

Also, why don't we make videotapes to be shown in our waiting rooms with details of our practices. The tapes could explain office routine, or insurance forms, or the ailments commonly treated by our specialty.

If a patient must wait for you, let them get something in your waiting room besides "General Hospital" or "Days of Our Lives." Let us get away from the old magazine syndrome and make that waiting time productive for our patients. The public relations benefit will outweigh the cost.

That is individual, personal, hands-on, doctor-patient communication.

There are other serious problems that we cannot solve in our office. We move closer every day toward some system of nationalized medicine. There are two reasons why such a system has not yet been promulgated in this country; one is the average citizen is not convinced that any system of rationed care is in his best interest—not yet.

The other reason is organized medicine. A lot of us are critical of the AMA, MSNJ, and our county societies, and not completely without reason. These organizations are not perfect. But, for all the mistakes they make, they still represent you at every level of society and they do it as well as they can with limited staff and with members who generally are nonparticipants, except to complain.

What they need to operate even better is not just your dues, important as they are, but your commitment. They need your willingness to march in Trenton or Washington for what you believe.

They need you to stand together as a body—not to defend your income but to defend the finest system of medical care in the world.

They need you to sit down together to develop programs to ensure no one is left out of that system because they have no money. They need you to commit yourself to the poor of your country, your state, your county, and your city. Unwed pregnant women, neglected children, the victims of AIDS, and the victims of drugs—to the minority patient—they all need our help and our service.

Don't say you don't have time and that it is someone else's problem.

Make time.

It is your problem because you are a human being and you have special skills. You can start solving society's problems by reaching out to those who were not born as talented as you, or as financially secure as you, or who lack the desire to work as hard as you do.

We are not all created equal—those of us in medicine know that better than anyone else. We were blessed with special talents and we were able to make the most of them.

If we do not help to solve these problems, we will not be happy with the solutions others will impose upon us. Most important, we have to do it because it is the right thing to do.

Let us begin now to recommit ourselves to the values that brought us into this difficult, demanding, and rewarding profession in the first place.

Let us care. Let us do no harm. Let us make a difference. ■

Panic Disorder and Agoraphobia

MORTON FIER, MD

Panic disorder and agoraphobia present in varied forms, yet the avoidant defenses remain remarkably similar. The author describes three cases of panic disorder; the symptoms relate to fear of loss of bowel control.

In recent years, the interest in the diagnosis and treatment of panic disorder and agoraphobia has grown exponentially. As early as 1989, Sheehan and associates estimated that as many as 12 million Americans were suffering from panic disorder.[1] As interest in the disorder has grown, and the diagnosis refined, it is safe to say that significantly more than the estimated 12 million people are burdened by the symptoms. *DSM-III-R* lists a series of 13 possible somatic symptoms that may occur during a panic attack: dyspnea, dizziness, palpitations or tachycardia, trembling, sweating, choking, nausea or abdominal distress, depersonalization or derealization, numbness or paresthesias, flushes or chills, chest pain, fear of dying, and fear of loss of control.[13]

Many patients present at hospital emergency rooms with 1 or more of these 13 symptoms. Medical evaluation generally fails to reveal any organic basis for the symptoms. A patient typically has an extensive workup that can include a stress test, echocardiogram, computed tomography scan, magnetic resonance imaging procedure, electroencephalogram, electrocardiogram, laboratory tests, and calorics. In addition, consultations with neurologists, cardiologists, internists, and otolaryngologists are part of the extensive evaluative process.

Lydiard and colleagues reported five patients with panic disorder and irritable bowel syndrome; symptoms resolved with antipanic treatment.[3] These authors suggest "a proportion of patients who are being treated for irritable bowel syndrome, in fact, may suffer from a panic-related disorder. Avoidance behavior and anxiety associated with symptoms consistent with irritable bowel syndrome should raise the clinical suspicion that a primary anxiety disorder may exist."

The myriad ways in which the defenses against panic attacks are presented continue to fascinate and challenge the clinician.[4,5] In evaluating patients for the diagnosis of possible panic disorder, the clinician must not only focus on the symptoms of the panic attack, but must be alert to the defensive avoidance of situations believed to precipitate attacks, and the preference of the agoraphobic to remain at home. The three case reports presented here demonstrate an unusual presentation of panic disorder, agoraphobia, and gastrointestinal complaints.

CASE REPORT 1

A 34-year-old, married, white female had gallbladder surgery six months prior to seeing me (November 1988). One year earlier, she had a baby, delivered by cesarean section; a few months after

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giving birth, the patient was diagnosed as having Hashimoto's disease.

Two weeks after gallbladder surgery, the patient developed "stomach pains" and the need to frequently use the toilet. She became preoccupied with the need to be near a bathroom and became increasingly anxious and frightened away from home: "What if I have to go and there is no available bathroom?" When seen in psychiatric consultation, she was agoraphobic and unable to leave home; she demonstrated vegetative signs of depression. Her mother-in-law and mother were in constant attendance during the day so that an adult would be available to watch the baby, should the patient need to go to the bathroom.

The diagnostic impression was agoraphobia with secondary depression. The patient was treated with imipramine 25 mg at bedtime, increased to 50 mg at bedtime one week later. She tolerated the medication well and within three weeks was totally symptom-free and planning to return to work as a computer specialist with a bank.

CASE REPORT 2

A 58-year-old, married, white male executive, had been involved in an automobile accident in which his car was "totalled." The patient was uninjured, but one year later he developed panic attacks. The patient was seen by a colleague in psychotherapy for several years without much benefit. He demonstrated many of the usual features of agoraphobia, e.g. fear of tunnels, bridges, traffic jams, and movies. In addition, when away from home, he constantly felt the urge to defecate. On work days, he arose at 4 A.M. and spent hours on the toilet, in the hope that he would completely empty his bowels, and thereby, obviate the need for further toileting. However, as soon as he left home he again felt the need to defecate and feared if he did not find a toilet quickly that he might soil himself. He carefully mapped out the route to work so that he would have ample access to public bathrooms and stopped three to four times on a 30-minute drive. He was most comfortable at home and avoided leaving home as much as possible. The diagnosis was panic disorder with agoraphobia. He was treated with imipramine, up to 300 mg daily. He felt somewhat better, but found the anticholinergic side effects intolerable. The patient then was treated with phenelzine (Nardil®) to 75 mg daily. He experienced significant symptom relief but developed sexual dysfunction. The dose was reduced to 60 mg daily and then to 45 mg daily with continued symptom relief and disappearance of the sexual difficulties.

CASE REPORT 3

A 45-year-old married male had a history of diarrhea since 1970; he felt the diarrhea was a stress-related symptom. Complete workup by a gastroenterologist failed to establish an organic etiology for the symptoms. Several years ago, while on a bus that was stuck in a tunnel, he had a frank panic attack for fear he might soil himself. He was obsessively preoccupied with thoughts of "What if I have to go, and there is no bathroom available?" He developed typical agoraphobic defenses, e.g. anxiety in a barber's chair, restaurant, and shopping malls. In theatres, he always chose an aisle seat so that if panicked, he could leave instantly. He was most comfortable at home and preferred not to leave.

With a diagnosis of panic disorder with agoraphobia, the patient was started on imipramine 25 mg at bedtime, increased to 50 mg at bedtime. He felt sedated, lethargic, and apathetic, and was unable to tolerate the anticholinergic side effects. The patient was switched to phenelzine (Nardil®) and gradually increased to 75 mg daily. At that dose, he was almost free of agoraphobic symptoms. He had occasional exacerbation of anxiety when forced to fly on business trips. He stated he was not 100 percent symptom-free at the present time, but felt significantly improved.

DISCUSSION

The three case reports, though not typical in the presentation of symptoms, all responded to standard treatment for panic disorder and agoraphobia. The clinician who sees patients complaining of anxiety must be careful to distinguish between generalized anxiety disorder and panic disorder. Though panic disorder and agoraphobia often present in a wide variety of symptoms, e.g. hyperventilation, chest pain, and bowel dysfunction, the defensive structure is amazingly similar. Whatever the symptoms, patients are most comfortable at home, avoid going out, and especially avoid situations in which they feel trapped. Treatment with imipramine or phenelzine generally produces dramatic improvement. ■

REFERENCES

1. Sheehan DY, Claycomb JB, Kouretas N: Monoamine oxidase inhibitors: Prescription and patient management. *Intern J Psychiat Med* 10:99-121, 1980.

2. *Diagnostic and Statistical Manual of Mental Disorders.* Washington, DC, American Psychiatric Association, 1987.

3. Lydiard RB, Lacara H, Ballinger JC: Can panic disorder present as irritable bowel syndrome? *J Clin Psychiat* 47:470-473, 1986.

4. Fier M: Agoraphobia, the "what if" syndrome. *J Med Soc NJ* 78:286-288, 1981.

Claustrophobia During MR Imaging

ROGER B. GRANET, MD
LAWRENCE J. GELBER, MD

Magnetic resonance imaging (MRI) is an effective diagnostic radiologic procedure with a wide margin of safety. The authors describe the phenomenology and etiology of claustrophobia during MRI and provide an integrative management approach for referring physicians, radiologists, and technicians who deal with this difficult problem.

Magnetic resonance imaging (MRI) is a valid, reliable, noninvasive radiologic procedure for the examination of structural pathology. With a wide margin of safety, including the lack of exposure to ionizing radiation, its utilization appears benign in regard to patient morbidity. However, MRI does present difficulty for a number of patients. In particular, the psychological experience of claustrophobia, the fear and attendant anxiety associated with closed spaces, is a dysphoric reaction for many individuals. Initial data suggested that 5 to 10 percent of patients experienced claustrophobia during MRI.[1,2] Subsequently, Brennan et al. reported that 35 percent of patients while undergoing MRI experienced anxiety, with the inability to move, length of procedure, size of the tunnel, and the feeling of being closed in, as the primary correlates of the anxiety.[3] Quirk et al. reported a series of exit interviews of patients who completed MRI.[4] Of those interviewed, 65 percent experienced anxiety or claustrophobia. In addition, 42 percent reported that they received little or no information about the procedure from the referring physician. In another study, Fishbain et al. documented several cases of long-term, delayed-onset claustrophobia, that occurred following the imaging procedure.[5]

Given the increased utilization of this radiologic technique and the significant incidence of claustrophobic reactions, this paper provides information for referring physicians, radiologists, and

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technicians. The phenomenology and etiology of claustrophobia in the MRI setting will be reviewed and an integrative management approach drawing upon biological, behavioral, and psychodynamic treatment strategies will be described.

PHENOMENOLOGY OF CLAUSTROPHOBIA

Claustrophobia is the persistent fear of being locked or shut-in and the fear of enclosed places.[6] The clinical expression of fear is of anxiety that may be central (psychic), i.e. a subjective sense of doom or apprehension; and peripheral (somatic), an adrenergic "surge" presenting with palpitations, tremulousness, xerostomia or sialorrhea, gastrointestinal discomfort, and sweating. The prevalence of this phobic reaction might be viewed on a bell-shaped curve with most people experiencing the sensation at one time or another, i.e. a normal variant and to a smaller number of individuals, it is a chronic, persistent, debilitating pathologic reaction.

There are three components to a claustrophobic reaction applicable to the MRI setting:[7] anticipatory anxiety precipitated by the possibility of being trapped or shut in the tunnel; central fear, i.e. intense anxiety experienced during the procedure; and avoidant behavior, such as refusing or prematurely terminating the procedure to decrease the anxiety. It should be emphasized that claustrophobia is not a fear of the object but more the potential negative outcome or consequence of being in the setting. In addition, most individuals who experience such phobic reactions realize the fear is irrational.

ETIOLOGY OF CLAUSTROPHOBIA

The causes of claustrophobia during MRI may be viewed from biological, behavioral, and psychodynamic perspectives. One biological theory is the concept of evolutionary prepared learning.[8] This theory suggests that claustrophobia may have involved stimuli that historically may have represented a danger to man, and still are reacted to as if they are dangerous. In the MRI setting, the sense of being "trapped" may have an evolutionary antecedent precipitating a perceived physical danger. Another biological theory postulates that a claustrophic reaction may be a function of aberrant neurotransmitter activity. For example, Liebowitz et al. have discovered elevated levels of epinephrine in some phobic individuals.[9]

The behavioral or conditional reflex theory views claustrophobia as an acquired, as opposed to an innate, behavior.[10] The phobia is seen as a conditioned response learned through the association of the phobic object, the MRI, with a noxious experience, or traumatic event.

Finally, there is the psychodynamic theory of claustrophobia. Freud argued that a phobia was a symptom of unresolved unconscious drives and conflicts.[11] A phobic symptom such as claustrophobia, might represent a conflict between aggressive or sexual impulses and the recognition that the expression of such an impulse might be met with external danger. In the MRI setting, the danger might be displaced onto the radiologic equipment. A less orthodox Freudian perspective would argue that claustrophobia is an anxiety reaction tied to the fear of losing control of something, i.e. the fear of losing control of one's "mind" and "going crazy."

A specific application of psychodynamic theory in the MRI setting relates to the unconscious defense mechanism of displacement. Often a patient referred for MRI is understandably fearful that something is "wrong" or "dangerous" in the body in the form of a disease. The patient might displace that fear from his body to the equipment and become frightened of it.

INTEGRATIVE MANAGEMENT APPROACH

Given the variable clinical presentation and the multidetermined etiology of claustrophobia during MRI, the referring physician, radiologist, and technician are faced with the challenge of being helpful to the phobic patient. An integrative management approach is offered to help the professional deal with such individuals. (Table).

Several general guidelines might be considered. Through both the literature and impressionistically, it would appear that the fear of losing control is a central dynamic for the claustrophobic individual. Such people are further compromised in the MRI setting since they anticipate the procedure will determine if, in fact, there is something "wrong" or out of control inside their bodies, i.e. medical disease. In addition, patients are placed in an emotionally and physically dependent position, further increasing their helplessness and potential regression. All energies should be directed towards giving these patients control. A related issue is knowing when to respect a patient's defenses such as denial and re-

Claustrophobia

The persistent fear of being locked or shut-in, and the fear of enclosed places.

Nuclear magnetic resonance

Noninvasive radiologic procedure for the examination of structural pathology.

pression. By definition, defense mechanisms are protective. If a patient is not open to discussion and appears to be adapting to the MRI stressors, not focusing on anxiety or stress may help him feel in control. In other words, at times, no intervention by those performing the procedure is useful and perceived by certain patients as reassuring and nonintrusive.

Another management strategy is education. One component is preprocedure counselling provided by the referring physician, radiologist, or technician. Patients might be asked for a history of claustrophobia. They must be reassured this is a common phenomenon, they are not "crazy," and everything will be done to ensure their comfort. They should be given information concerning the procedure. This educational process might focus on areas of safety such as the noninvasiveness of the technique, or the lack of exposure to ionizing radiation. In addition, a description of the procedure (of being placed in the tunnel, the amount of time they might be in the tunnel, and an explanation that the changing magnetic gradients cause "banging") should be offered. Additionally, patients should be reminded that the apparatus generates heat and they may experience a sensation of thermal discomfort. Also, after the procedure, claustrophic patients might be given the opportunity for catharsis and "debriefing." This also provides an opportunity to positively reinforce a difficult experience.

During the procedure itself, support and reassurance are critical to minimize phobic anxiety. Patients must be given ultimate control by letting them know they are able to discontinue the procedure if necessary. Clinically, it has been observed that patients can maintain control with a handheld panic button. Paradoxically, once given the permission to do so, it rarely is necessary. Constant emotional support, with noninfantalizing feedback and reassurance that the patient is in the hands of a competent professional is most useful. If the patient begins to experience anxiety, gentle limit setting so he can tolerate the discomfort often is helpful. This often can be accomplished by informing the patient that the examination consists of, depending on the type of study, approximately four sequences each lasting between five and ten minutes and that if he can tolerate even the first sequence, it may be diagnostic. Often, the patient then will be able to proceed with the second sequence. Beginning with the sequence that is most likely to be diagnostic will be helpful to the radiologist in case the examination must be terminated prematurely.

Specific environmental manipulations have been described that attempt to increase the level of external stimuli. Ellis et al. reported the use of patient blinders or complicated maneuvers such as using compressed air to transmit music through the headphones.[12] They describe these interventions as time consuming and not particularly effective. Today, there are nonferrous components available, allowing patients the use of headphones within the scanning bore. Patients are encouraged to bring cassettes that serve to increase the familiarity of this often frightening MRI setting as well as lessen the negative impact of the "banging" created by rapidly changing magnetic gradients. Hricak and Amparo have used a patient positioning technique that appears quite useful.[13] Noting that the supine position, with the resultant inability to see either end of the bore, leads to increased darkness, the authors suggested a simple approach of placing the patient in a prone position with the chin supported by a pillow, so the patient's eyes face the opening of the bore. In this manner, the patient sees light and the presence of others in the external environment. One potential

Table. ***An integrative management approach.***

General Guidelines
Theme of control
Respect of defenses

Education
Preprocedure Counselling—Explanation: safety, expectations
Postprocedure Counselling—Debriefing, catharsis, reinforcement

Support and Reassurance
Emotional support
Reassurance
Gentle limit setting

Environmental Manipulation
Patient blinders/music
Prone positioning
Fans
Prism glasses
Companions

Behavioral Techniques
Imaginal exposure
Fantasy

Medication
Benzodiazepines
Beta-blockers

problem with this approach is that many surface coils are designed for the supine position. There are other techniques to accomplish these same goals while maintaining the supine position. These include a large light at one or both ends of the bore and the use of nonferrous prism glasses that permit the patient to see out of one end of the bore. In addition, some units allow the presence of a fan at one end of the bore contributing a different kind of external stimulus. Finally, one of the more successful ways of changing the MRI setting, to lessen patient anxiety, is to allow a friend or family member to be in the scanning room. The companion can hold hands or feet, carry on conversation, or be positioned to be seen with the aid of prism glasses, through the end of the bore.

For intensely claustrophobic patients who have refused or failed to tolerate MRI, the behavioral technique of imaginal exposure may be of use. First, the patient is taught relaxation techniques such as slow, deep breathing, and muscle relaxation and then instructed to think of the machine. The combination of being relaxed while thinking of MRI might help extinguish the fear. Klonoff et al. reported a useful behavioral technique that included a specific systematic desensitization to be practiced at home, prior to MRI.[14] A related behavioral technique is the use of fantasy. Patients might be instructed to daydream about positive memories or situations that might distract them from present anxiety. The use of fantasy is based on the premise that it is impossible to maintain two simultaneous cognitions or images, i.e. if one is focused on a relaxing image, it is not possible to focus on a negative, anxiety-provoking one at the same time.

The final management option is the judicious use of psychotropic medication. The goal is to decrease the anticipatory anxiety of claustrophobia as well as to minimize fear during the procedure itself. In the inpatient setting, a rapid onset, relatively long-acting benzodiazepine such as diazepam 2 to 10 mg by mouth given approximately 30 to 60 minutes prior to the procedure might be indicated. For the outpatient, who would be commuting, a short-acting benzodiazepine such as lorazepam 0.5-1.0 mg or oxazepam 10-20 mg, by mouth 30 to 60 minutes before the procedure, should be of help. Those patients who are ambulatory should be cautioned concerning sedation and psychomotor impairment and whenever possible, instructed to have someone to escort them. Benzodiazepines are particularly useful for the psychic (central) and anticipatory components of anxiety. For those who have significant somatic (peripheral) anxiety, a beta-blocker such as propranolol, given orally 20 to 40 mg one hour prior to the procedure, is suggested to decrease the excessive peripheral autonomic activity. The usual contraindications to beta-blocker usage should be observed, including a history of heart block and bradycardia, bronchial asthma, and congestive heart failure.

SUMMARY

The efficacy and safety of MRI has led to its increased use as a diagnostic tool. As such, the capacity to ensure patient safety and comfort is critical. The specific psychiatric experience of claustrophobia appears to occur with greater frequency during the MRI procedure than originally was believed. It is hoped that through a broader understanding of the phenomenology, etiology, and treatment of this dysphoric reaction, the referring physicians, radiologists, and technicians will be better able to manage their patients. ■

REFERENCES

1. National Institutes of Health Consensus Development: Conference on Magnetic Resonance Imaging. Bethesda, MD, 1987.

2. NY State Department of Health: New York State Demonstration Project on Magnetic Resonance Imaging. 1987.

3. Brennan SC, Redd WH, Jacobsen PB, et al.: Anxiety and panic during magnetic resonance scans. *Lancet* 2:512, 1986.

4. Quirk ME, Letendre AJ, Ciottone RA, et al.: Anxiety in patients undergoing MR imaging. *Radiology* 170:463-466, 1989.

5. Fishbain DA, Goldberg M, Labbe E, et al.: Long-term claustrophobia following magnetic resonance imaging. *Am J Psychiatry* 145:1038-1039, 1988.

6. Campbell RJ: *Psychiatric Dictionary.* New York, NY, Oxford University Press, 1989.

7. Hollander E, Liebowitz MR, Gorman JM: Anxiety disorders, in Talbott JA, Hales RE, Yudofsky SC, *The American Psychiatric Press Textbook of Psychiatry,* Washington, DC, Am Psychiatric Press, Inc. 1988.

8. Seligman ME: Phobias and preparedness. *Behav Ther* 2:307-320, 1971.

9. Liebowitz MR, Fyer AJ, Gorman JM, et al.: Lactate provocation of panic attacks: Biochemical and behavioral findings. *Arch Gen Psychiatry* 41:764-770, 1984.

10. Pavlov IP: *Conditioned Reflexes in an Investigation of Psychological Activity of the Cerebral Cortex.* NY, New York, 1960.

11. Freud S: Inhibitions, symptoms and anxiety, in, Strachey J, *The Standard Edition of the Complete Works of Sigmund Freud.* London, Hogarth Press, 1961.

12. Ellis JH, Dallas CS, Russell RJ: Communication device for patients undergoing nuclear magnetic resonance imaging. *Radiology* 149:855, 1983.

13. Hricak H, Amparo EG: Body MRI: Alleviation of claustrophobia by prone positioning. *Radiology* 152:819, 1984.

14. Klonoff EA, Janato JW, Kaufman B: The use of systematic desensitization to overcome resistance to magnetic resonance imaging (MRI) scanning. *J Behav Ther Exp Psychiatry* 17:189-192, 1986.

Cancer in Inguinal Hernias

JAMES W. KNECHT, MD

Cancer in inguinal hernias is rare. The author reports the first case of thymoma metastatic to an inguinal hernia sac (saccular) and the 13th case of colon cancer in an inguinal hernia (intrasaccular); both cases presented clinically as incarcerated hernias.

It is unusual to find cancer in an inguinal hernia. When found, it often is intrasaccular (tumors derived from organs contained within the sac). Saccular tumors (tumors involving the hernia sac itself) are less common. I report on two new cases: one case is an intrasaccular colon cancer in a sliding left inguinal hernia presenting with incarceration (only 12 cancers of this type have been previously reported) and one case of cancer that is saccular (the first reported case of a thymoma metastatic to an inguinal hernia sac).

CASE REPORT 1

A 95-year-old male was admitted with an irreducible large left scrotal hernia, weight loss, and change in bowel habits. He had an asymptomatic large left inguinal hernia for years. The colonoscopist reported finding a cancer at the level of 30 cm and a barium enema revealed the tumor to be in the scrotal hernia (Figure 1). At operation, a sigmoid tumor was in the hernia sac; it could not be reduced through the internal ring. The proximal sigmoid colon and mesentery, however, could be pulled out through the enlarged internal inguinal ring. The sigmoid colon was resected and the inguinal hernia repaired through the hernia incision. The patient made an uneventful recovery.

CASE REPORT 2

A 29-year-old male had a history of a sudden onset of a swollen, painful, tender, right groin lump of several days' duration. He had a past history of multiple thoracotomies, radiation, and chemotherapy for malignant thymoma. He reported no change in bowel habits or difficulty in eating. On physical examination, an incarcerated right inguinal hernia was found. An x-ray obstruction series was unremarkable. A chest x-ray, although abnormal in ap-

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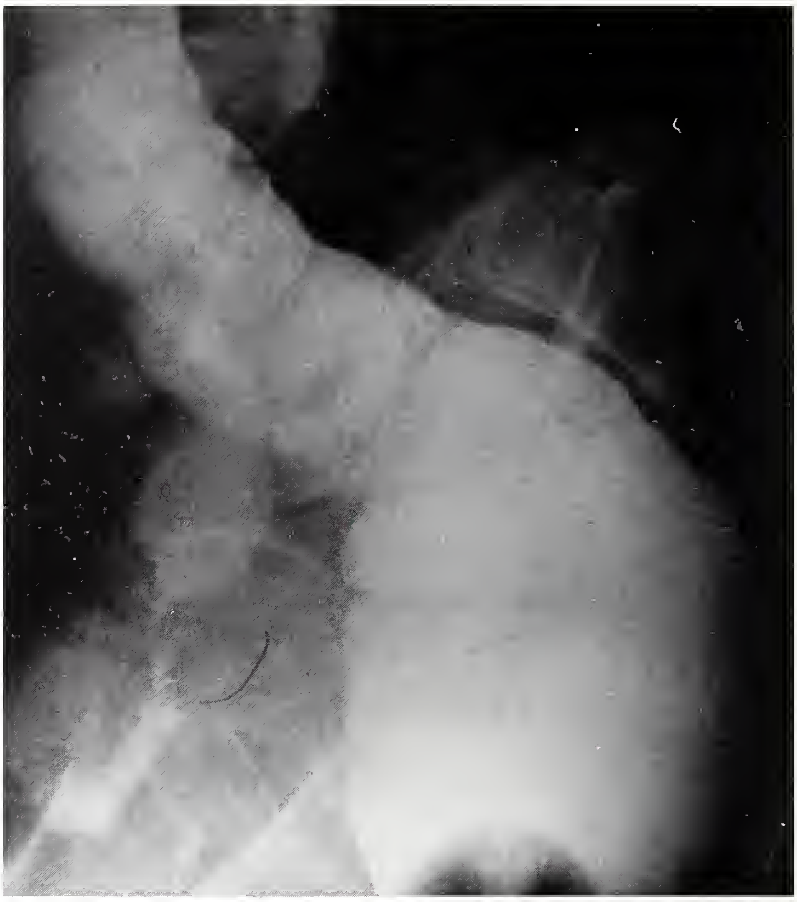

Figure 1. Barium enema showing constricting lesion in sigmoid colon in an inguinal hernia.

pearance due to his previous resections, was unchanged from previous films. At operation, the hernia sac was adherent to the cord structures, and when opened, contained fluid and two metastatic thymoma tumor nodules (Figures 2 and 3). There was a small communication between the sac and the peritoneal cavity. An abdominal computed tomography scan obtained postoperatively was normal.

COMMENTS

Inguinal hernia sacs can contain almost any structure in the abdomen, yet tumors rarely are found. The first reported case of a primary hernia sac tumor was by Araud in 1749.[1] Since that time, very few additional cases have been reported. In 1954, Fieber and Wolstenholme reviewed the world literature and found only sporadic case reports.[2] These included carcinoma of the appendix, 3 fibrosarcomas, fibroma of the mesentery, 2 mesotheliomas, carcinoma in a bladder diverticulum, carcinoma of the bladder, 2 liposarcomas, and 2 colon carcinomas. Five years later, Yoell reported that of 800 surgically excised hernia sacs, only 3 hernia sacs were found to contain tumors, an incidence of less than 0.4 percent.[3] The tumors included 1 colon cancer, 1 suspected prostate cancer metastasis, and 1 metastatic cystadenocarcinoma of the ovary. In a 1980 review of world literature, Roslyn found only 23 primary hernia sac tumors.[4] In 1983, Kanzer and Rosenberg reported finding an implant of hypernephroma in a hernia sac.[5] Primary hernia sac tumors are classified according to a system developed by Lejars into intrasaccular (an organ with tumor in a hernia sac) or saccular (tumor involving the sac itself).[6] Of the 23 cases of primary hernia sac tumors reviewed by Roslyn, 16 tumors were found to be intrasaccular, while 7 tumors were saccular. In his 1987 paper, Pappas reviewed the literature and found only 11 previous cases of colonic cancer in an inguinal hernia.[7] He reported the 12th case, and my case was the next reported case.

In reviewing the literature on the less common saccular tumors, I could find no previously reported cases of thymoma metastatic to an inguinal hernia sac.

Both cases reported in this paper presented clinically as incarcerated hernias. Only one case was confirmed to be incarcerated at operation (case 1). A fluid-filled sac with metastatic thymoma tumor nodules was found in the other case. The colonic cancer reported by Pappas et al. also was complicated by strangulation and perforation. One of the

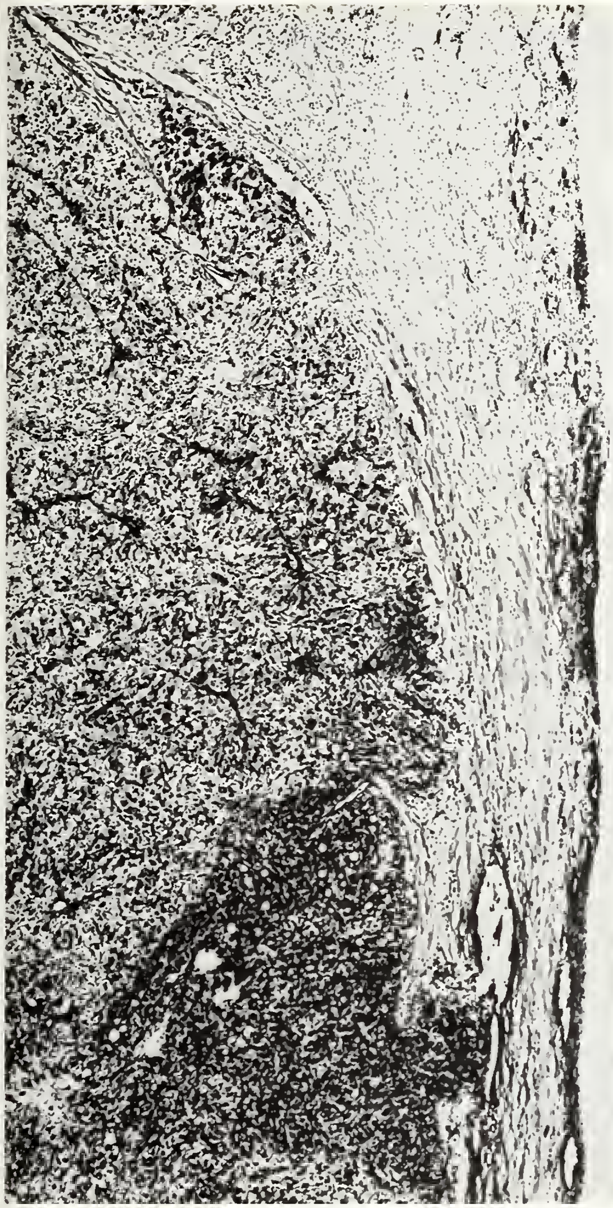

Figure 2. Low-power magnification of thymoma tumor nodule with hernia sac wall.

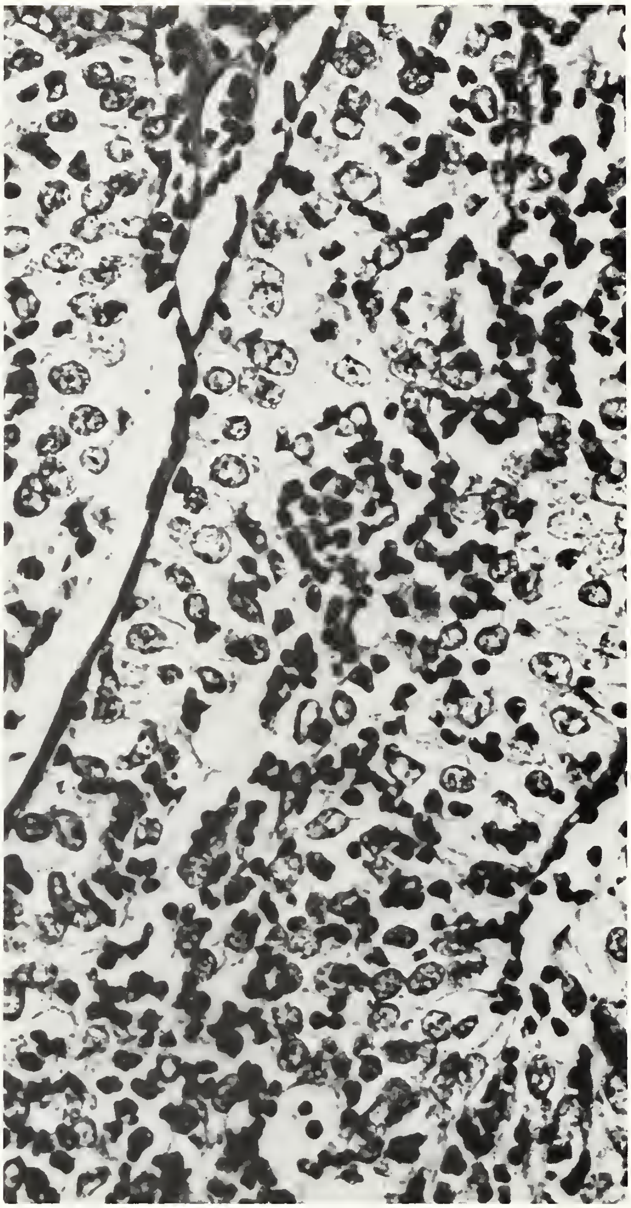

Figure 3. High-power magnification of thymoma from case report 2, shown in Figure 2.

two cases reported by Sriham and Nichols had an incarcerated right inguinal hernia associated with a colon cancer.[8] Fieber and Wolstenholme comment that a diagnostic feature in the majority of cases of tumors in hernia sacs is the irreducibility of the contents. They suggest that incarceration of a long-standing hernia should alert the physician to the possibility of a tumor. ■

REFERENCES

1. Araud G: Traite des hernias on Descentes. *Paris Le Mercier* 2:3, 1749.

2. Fieber S, Wolstenholme J: Primary tumors in inguinal hernia sacs. *Arch Surg* 71:254-256, 1955.

3. Yoell JH: Surprises in hernia sacs, diagnosis of tumors by microscopic examination. *Calif Med* 91:146-148, 1959.

4. Roslyn JJ, Stabile BE, Rangenath C: Cancer in inguinal and femoral hernias. *Am Surg* 46:358-362, 1980.

5. Kanzer B, Rosenberg RF: Unusual contents in inguinal hernia sacs. *NY State J Med* 83:1055-1056, 1983.

6. Lejars J: Neoplasmes herniaires et periherniaires. *Gaz Hosp* 62:801, 1889.

7. Pappas D, Romeu J, Pradyuman D, Subietas A: Colonic carcinoma in an inguinal hernia sac. Case report and review of the literature. *Mount Sinai Med* 54:162-164, 1987.

8. Sriham K, Nichols R: Colon carcinoma in inguinal hernia. *IL Med J* 169:165-166, 1986.

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Marketing the Technologist

in the Physician Office Laboratory

KATHLEEN L. VOLDISH, CLA (ASCP)

The informed and conscientious physician who hires a certified technologist can be prepared for the transitions that future state and federal regulations bring to a private physician laboratory.

The number of physicians' office laboratories (POLs) is rapidly increasing. In-office testing began as a few simple tests, such as urinalysis, hematocrit, and glucose levels. Today, the large POLs are very similar to small hospital laboratories. In response to the testing performed in POLs, the market for in-office in vitro products has experienced a 26 percent compound annual growth between 1984 and 1987. In 1989, this retail market for in-office in vitro products grew to approximately $750 million.[1] In the past few years, laboratory equipment manufacturers have entered the private office marketplace at an aggressive pace. Where do certified laboratory personnel fit into this picture? The physician selects a system after considering information supplied by the manufacturer. The statistics provided by the manufacturers are based on the results the system produces when tests are performed in a hospital-like setting by trained laboratory personnel. Little information, if any, is provided concerning the accuracy and precision the system will produce when operated by an office staff with little or no formal laboratory training.[2,3] Since this type of objective evaluation not always is available, the physician is left to assume the system will give reliable results regardless of the operator's training or skill.

A study of technical performance and the training and experience of staff[4] compared laboratory test results obtained on identical systems by noncertified office workers (including nurses) and medical technologists certified by the American Society of Clinical Pathologists. The test result accuracy scores obtained by laboratories employing only certified medical technologists was 95 percent (standard deviation: 4 percent) compared to 75 percent (standard deviation: 30 percent) by laboratories employing only noncertified medical technologists. Research conducted by the Idaho Bureau of Laboratories revealed other notable statistics.[5] For example, acceptable quality control programs and records were kept in 70 percent of office laboratories supervised by medical technologists and in only 26 percent of

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office laboratories supervised by nurses. The study also noted that most office staff workers had little or no understanding of the concept of quality control. Maintenance logs on equipment were kept by 79 percent of technologist-supervised laboratories compared to 33 percent of those supervised by nurses. The variability of results was three to five times greater in laboratories not employing certified medical technologists. These studies concluded that formal technical education and certification assure more accurate results and that the quality produced by the system often results more from the system operator, not necessarily from the sophistication of the equipment.

Establishing an office laboratory is a new aspect of medical practice for most physicians. Medical schools emphasize interpretation and application of laboratory tests, not methodology.[2] The office practitioner takes on the added responsibilities of laboratory director, including periodical review of all aspects of the laboratory. The advantages of having an office laboratory are numerous: convenience for both the patient and physician, rapid turn-around time resulting in more rapid treatment, and increased revenue. These advantages quickly can become insignificant if the laboratory test results are inaccurate. The physician can be held professionally responsible if incorrect test results adversely affect patient outcomes.[6] Manufacturers of office laboratory equipment may lead physicians to believe that a two- to eight-hour training session will produce the same accuracy of test results from a nontechnically trained staff member as from a trained professional. This assumption on the part of the physician may compromise the quality of office testing. The physician who is willing to invest time and money to select proper laboratory equipment also should take the time to select the proper operator for that equipment. The apparent ease of operating many examples of laboratory equipment can be dangerously misleading. For most instruments, pushing a button does not insure a correct result. Specimens must be collected properly, identified, and stored. Standards, controls, and reagents that require preparation by the user must be precise. Proper calibration and routine maintenance must be performed. Accurate records must be maintained; results must be reported properly.[7] Each step is critical. Medical technologists have had formal didactic and clinical training and have accumulated a wealth of technical knowledge that can prove invaluable in an office laboratory setting. The physician confidently can delegate nearly all of the responsibilities of running the laboratory to the technologist.[2] The physician, patient, and staff all benefit from the expertise brought to the office setting by the technologist.

Only 30 percent of POLs now employ certified medical technologists.[8] Some states have defined personnel standards for office laboratories; most states have not.[5,7] States that have few or no regulations are approaching the adoption of such standards. The Health Care Financing Administration plans nationwide proficiency testing under the Clinical Laboratory Improvement Amendment (CLIA) of 1988. POLs will have until July 1, 1991, to meet personnel and inspection requirements of CLIA. It is time the technologist gets marketed to the private office as aggressively as the manufacturer markets laboratory equipment. Employment in POLs offers technologists yet another setting in which to offer their expertise. The POL atmosphere, work schedule, and type of patient provide an alternative to the technologist's more traditional work setting. The informed and conscientious physician who hires a certified technologist can be prepared for the transitions that future state and federal regulations will bring. A technologist will be a great asset to the health care team in this new setting just as he has been in the traditional setting.

ASSOCIATE MEMBER SECTION

COLA (Commission on Office Laboratory Assessment) works extensively with the Department of Health and Human Services to bring rational regulations to office laboratories. They have applied for "deemed status," which if granted, means this accreditation will be sufficient for an office laboratory to meet CLIA federal regulations. This is an excellent path for physicians with POLs to take to prepare for the future. More information about COLA can be obtained from the POL Committee, through the author. ■

REFERENCES

1. Georgen K: Revisiting physician office diagnostics. *Am Clin Lab* 8:30-33, 1989.
2. Belsey R, Baer DM, Sewell D: Laboratory test analysis near the patient. *JAMA* 255:775-786, 1986.
3. Belsey R, Vandenbark M, Goitein RK, Baer DM: Evaluation of a laboratory system intended for use in a physician's office. *JAMA* 258:357-360, 1987.
4. Lunz ME, Castleberry BM, James K, Stahl J: The impact of the quality of laboratory staff on the accuracy of laboratory results. *JAMA* 258:361-363, 1987.
5. Crawley R, Belsey R, Brock D, Baer DM: Regulation of physicians' office laboratories: The Idaho experience. *JAMA* 255:374-382, 1986.
6. Belsey R, Greene M, Baer DM: Managing liability risk in the office laboratory. *JAMA* 256:1338-1341, 1986.
7. Board of Trustees Report: Clinical laboratory tests and standards. *JAMA* 255:373, 1986.
8. ASCP/CAP 1986 Spring Meeting, Physician Office Laboratories.

Contraceptive Use

for Planned Parenthood Patients

LEWIS E. SAVEL, MD

Three hundred consecutive new patients coming to Planned Parenthood clinics were reviewed. Of these patients, 68.3 percent were not using contraception and 67.8 percent had never used contraception. Also, 35.1 percent had experienced one or more pregnancies, and 52 percent had first coitus before 16 years of age.

In an effort to evaluate the extent of apathy about using contraception, we reviewed 300 new patients coming to two clinic sites of Planned Parenthood-Essex County. We studied 150 patients from an urban clinic (Chubb Center, Newark); and 150 patients from a suburban clinic (Egner Center, Verona).

Of the patients reviewed, 68.3 percent were not using contraception and 67.8 percent had never used contraception. In the group not using contraception, 35.1 percent had experienced one or more pregnancies (Table 1).

At the urban clinic, 89.3 percent of the new patients were not using contraception; 67.1 percent had never used contraception; and 40.3 percent had experienced pregnancy. At the suburban clinic, 47.3 percent were not using contraception; 69 percent of these patients had never used contraception; and 25.3 percent had experienced pregnancy (Table 1).

Among the 25,712 patient visits at Planned Parenthood-Essex County (1988), 6,000 were for pregnancy testing. Thus, 23.3 percent of all the clinic visits related to possible pregnancy.

There were 164 patients in the study who were 19 years of age or younger; this was 54.6 percent of the total group studied. Among this teenage group, 78.6 percent were not using contraception and 83.7 percent had never used contraception. Pregnancy had been experienced by 22.5 percent of these young patients (Table 2). In this teenage group at the urban clinic, 93.3 percent were not using contraception; at the suburban clinic, 60.8 percent were not using contraception (Table 2).

In the group of patients 20 years of age or older, there were 133 patients (44.4 percent of the total). In this group, 51.8 percent were not using contraception, and 47.8 percent had never used contraception. Among the 20 years of age or older patients, 68 percent had experienced one or more pregnancies (Table 3). The pregnancies in this group, using no contraception, could be voluntary, but the 22.5 percent pregnancy rate noted in the 19 years of age and younger group, more likely was inadvertent.

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Table 1. *General statistics.*

	Urban Center (Chubb)		Suburban Center (Egner)		Total	
	Number	Percent	Number	Percent	Number	Percent
Charts Reviewed	150		150		300	
No Contraception	134	89.3	71	47.3	205	68.3
No Contraception/ No Previous Contraception	90	67.1	49	69.0	139	67.8
No Contraception And Pregnancy	54	40.3	18	25.3	72	35.1

Table 2. *Group 19 years of age or less.*

	Urban Center (Chubb)		Suburban Center (Egner)		Total	
	Number	Percent	Number	Percent	Number	Percent
19 years of age or younger	90		74		164	54.6
19 years of age or younger/ no contraception	84	93.3	45	60.8	129	78.6
19 years of age or younger/ no contraception/ no previous contraception	69	82.7	39	86.6	108	83.7
19 years of age or less no contraception and previous pregnancy	18	21.4	11	24.4	29	22.5

Table 3. *Group 20 years of age or older.*

	Urban Center (Chubb)		Suburban Center (Egner)		Total	
	Number	Percent	Number	Percent	Number	Percent
20 years of age or older	57		76		133	44.4
20 years of age or older/ no contraception	42	73.7	27	35.5	69	51.8
20 years of age or older/ no contraception no previous contraception	18	42.8	15	55.5	33	47.8
20 years of age or older/ no contraception and pregnancy	33	78.6	14	51.8	47	68.0

The age of the first coitus (Table 4) was before 16 years of age in 52 percent of the patients at the urban center, and in 22 percent of the patients at the suburban center. But the first coitus occurred at 17 years of age or older in 27.3 percent of the patients at the urban center and in 56.6 percent of the patients in the suburban center.

DISCUSSION

From these statistics, it is apparent that a significant number of patients coming to Planned Parenthood-Essex County clinics are not using contraception and more than half of these patients (67.8 percent) had never used contraception. This highlights the need for sex education to achieve the dictum, "No woman should ever be pregnant unless she wants to be." The failure to use contraception (78.6 percent) is a serious problem. The pregnancy rate of 22.5 percent presents a social problem.

A startling revelation is the fact that in the 20 years of age and older group, 47.8 percent had never used contraception. This occurred despite the widespread attempts to educate women, starting at relatively early ages. Our approach to teaching con-

Table 4. ***Age of first coitus.***

	Years of Age									
	12 or Less	13	14	15	16	17	18	19	20	Over 20
Urban Center	10	5	14	49	31	18	8	5	3	7
Suburban Center	1	6	9	18	31	40	24	11	6	4
15 years of age or less										
Urban Center	10	5	14	49	Total 78 (52%)					
Suburban Center	1	6	9	18	Total 34 (22%)					
17 years of age or over										
Urban Center						18	8	5	3	7 Total—41 (27.3)
Suburban Center						40	24	11	6	4 Total—85 (56.6)

traception and controlling pregnancy is flawed, and must be corrected.

The population served in our urban center differs significantly from the population seen in our suburban center. The incidence of pregnancy, without contraception, seems to vary significantly. Of interest is the fact that 89.3 percent of new patients coming into the urban center were not using contraception compared to 47.3 percent at the suburban clinic, yet 67.1 percent at the urban center and 69 percent at the suburban clinic had not used contraception previously. Thus, suburban patients finally had begun to use contraception (47.3 percent not using now) whereas urban patients predominately still were not using contraception (89.3 percent).

The occurrence of first coitus in 52 percent of the patients before 16 years of age at the urban center compared to 22 percent at the suburban center correlates with the rate of "no contraception" 93.3 percent at the urban center and 60.8 percent at the suburban clinic. Patients, who became sexually active at an earlier age, were less likely to use contraception. The problem is manifestly more pressing in the urban population than in the suburban population where the first coitus occurs at 17 years of age or older in 56.6 percent.

The need for improvement in sex education is apparent. The deficit to be made up applies equally to different population compositions, but it patently is more urgent in the urban population. The need to inform and to obtain compliance is imperative to reduce a 22.5 percent pregnancy rate among women 19 years of age or younger. Pregnancy in this group is particularly undesirable for its personal, social, and community impact.

Realistically, much must be done to change the sexual practices of women to avoid sexually transmitted diseases and to obtain better control of childbearing. The goal of having each woman aware and striving for personal control of her own childbearing is desired. Sexual and contraceptive education of teenagers must include discussions of abstinence, but a broader educational approach is vital. A woman who exposes herself to the "hazards of pregnancy" should have available the instruction and choice of the method to control reproduction.

Teenagers should be encouraged to develop their individual personalities so that self-confidence can be achieved, enabling them to resist peer pressure. Relationships that they establish should not depend initially or primarily on sex. The informed patient will be able to make an intelligent decision as to when she will become pregnant or how she can control her fertility. This can be accomplished only with increased efforts by schools, planned parenthood groups, advisors, and parents.

SUMMARY

The study of 300 consecutive new patients coming to the clinics of Planned Parenthood-Essex County revealed the magnitude of the group not using contraception, 68 percent. Over 20 percent in the 19 years of age or less group had experienced pregnancy. In the 20 years of age or older group, 68 percent experienced pregnancy, some being intentional.

The statistics suggest that the problem of "no contraception" is somewhat more acute among urban patients (89.3 percent) than among suburban patients (47.2 percent). Moreover, urban patients experienced more pregnancies (40.3 percent) compared to suburban patients (25.3 percent). The earlier age of first coitus (before 16 years of age) in the urban clinic related to the high incidence of "no contraception" (93.3 percent in teenagers) and a higher pregnancy rate.

Much is to be done to educate and guide women of all ages and social groups to assist them in controlling their own reproduction. ■

A Successful Partnership

STEPHANIE LICHTMAN, MPA
JOSEPH GORRELL, JD

Physicians considering partnership agreements should follow a well-designed plan for recruitment, interviewing, and negotiation. This process can ensure future success of the partnership, and prevent legal difficulties.

Physicians with established, successful practices often reach a point in their careers at which they consider bringing a new physician into their practice. The reasons vary and may include a desire to expand a practice, a means of insuring financial security by providing a mechanism for buy-out at retirement, a desire for professional companionship, and the provision of stable coverage that can enable the physician to spend more time outside his practice. Physicians considering bringing a physician into their practice should properly evaluate whether a partnership is the right arrangement for them.

THE FIRST STEPS

The initial questions are: Can the practice financially absorb a new associate? Does the practice have a volume of patients to support an associate? Is there potential for expansion of the practice?

Having decided that enlarging the practice will be beneficial, the first consideration is finding an appropriate candidate. Various ways to locate your new associate include: contacting professional associations and residency programs; advertising in professional journals; retaining professional recruit-

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ers; and word of mouth. Consideration also may be given to discussions with colleagues or competitors interested in merging practices.

Once candidates have been contacted, and after receiving the candidates' curriculum vitae, the process is twofold: interview the candidate, preferably at your office, and bring the candidate to hospitals at which you practice. Secondly, when you identify a candidate in whom you are interested, it often is beneficial to invite him for a social visit; this occasion can help you gain insight into the candidate and begin to build a relationship.

Initial Questions

- Can the practice financially absorb a new associate?
- Does the practice have a volume of patients to support an associate?
- Is there potential for expansion of the practice?

Once you have selected a candidate, references should be contacted. These should include not only the names provided by the applicant, but also any directors of the candidate's training programs.

NEGOTIATIONS

During the interview process, it is useful to formulate issues important to you in developing a contract. You will want to consider starting salary, fringe benefit packages, and appropriate buy-in and buy-out arrangements should you decide to bring the physician into your practice as a partner.

Finding an attorney who is experienced in negotiating medical partnerships is an important step. Names can be obtained from colleagues who have been through the process, a local medical society, and the local bar association. At the same time, you will want to meet with your accountant to discuss the financial status of the practice and then ask the attorney and accountant to work together.

While it is not necessary for the attorney to negotiate the basic terms with the candidate's attorney, it is useful to obtain guidance as to what terms should be discussed with the candidate. These issues will include: compensation, including fringe benefits; direction and control of the practice during the initial years; an appropriate period of time for making the decision if and when the candidate will be eligible for partnership; the inclusion of a productivity clause; whether a restrictive covenant will be included should the candidate separate from the practice; the on-call and coverage responsibilities of the new associate; and the potential for expansion of the practice.

Probably the one thing the candidate will want to raise after compensation will be whether partnership is on the horizon. Assuming that partnership is to be considered, you will have to decide whether basic partnership issues are decided at the outset or whether these will be deferred until you have decided to bring the associate in as a partner. Partnership issues include:

1. What will be the business form of the practice, i.e. partnership or professional corporation?
2. Where will the principal office be and will additional offices be established?
3. How much initial capital will be needed and in what proportion will it be contributed?
4. Will all partners be required to devote all their professional services exclusively to the partnership?
5. Will there be a buy-in to the practice, and if so, on what terms?
6. What are the partnership expenses, including legal fees, accountant's fees, medical equipment and supplies, office equipment, pension contributions, and health, disability, life, and malpractice insurance?
7. Will the senior member of the practice be the managing partner, and if so, for how long?
8. What events can trigger a termination of one of the members from the practice?
9. What method will be established for paying the debts of the practice and distributing the remaining assets if you dissolve the practice?
10. Will either physician be restricted geographically in establishing a new practice?
11. Will the senior physician be compensated, for example, in the case of retirement?

These issues are but examples of the variety of factors that should be considered when a new physician is brought into a practice. Complete discussion of these issues with the candidate prior to entering your practice can obviate later misunderstandings and avoid future legal disputes.

SUMMARY

Once you have decided that your practice would benefit from and could support a partner, you should carefully select a candidate using a well-thought-out interview process. Careful review of all partnership issues in advance of any contract can help obviate later misunderstandings and avoid future legal disputes. Advanced planning can help guarantee that your future partner will be an asset, not a liability, to your practice. ■

Cystic Right Upper Quadrant Mass

JAMES H. JACOBY, MD

Radiograph of a cystic right upper quadrant mass is presented with differential discussion of pancreatic and biliary cystic lesions.

Our patient is a 39-year-old white female with a one-month history of epigastric and right upper quadrant pain related to fried and fatty foods. Her initial attack lasted approximately eight hours and was characterized by continuous pain and nausea. Physical examination and laboratory data workup were normal.

The demonstration of mass effect upon the duodenal loop on an upper gastrointestinal series prompted performance of a computed tomography (CT) scan (Figure 1).

DISCUSSION

The CT scan demonstrated a well-defined, homogeneous, 5 cm low density mass occupying the head of the pancreas. Cystic neoplasms of the pancreas are relatively uncommon, and account for only 10 percent of all cystic pancreatic masses. Microcystic adenomas (serous cyst adenomas) occur primarily in the elderly and may vary in size from 1 to 12 cm. These tumors have virtually no malignant potential. Although these tumors frequently involve the head of the pancreas, the microcystic consistency of this mass frequently presents as a solid-appear-

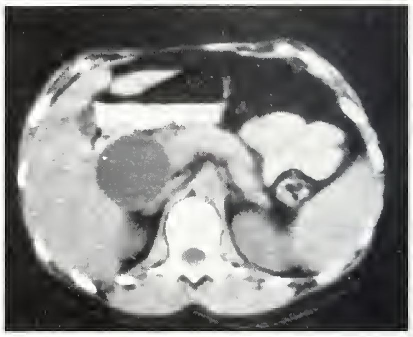

Figure 1. Computed tomography scan demonstrating a 5 cm smoothly marginated low-density mass located in the region of the head of the pancreas.

Dr. Jacoby, editor of this column, is acting chairman, Department of Diagnostic Radiology and Nuclear Medicine, Cooper Hospital, Camden, and clinical assistant professor of radiology, UMDNJ-Robert Wood Johnson Medical School. Requests for reprints may be addressed to Dr. Jacoby, Cooper Hospital/University Medical Center, One Cooper Plaza, Camden, NJ 08103.

ing tumor on CT examination and an echogenic or hypoechoic mass on ultrasound examination. Macrocystic adenomas (mucinous cyst adenomas), in contradistinction, do occur in the younger age population, with a 6:1 female preponderance. Unlike the microcystic variety, these tumors contain mucin and have a malignant potential. While they may be large, frequently they involve the tail or body of the pancreas and often are multiloculated with thick septa. At times, these tumors may be difficult to distinguish from pseudocysts of the pancreas.

Pseudocysts of the pancreas generally are associated with other signs of pancreatitis, including pancreatic effusions or diffuse enlargement of the pancreas. Frequently, they are not as well marginated as this mass and they often contain internal debris. The diagnosis of pancreatitis generally is established clinically; this patient had no signs or symptoms of pancreatitis.

An endoscopic retrograde cholangiopancreatogram (ERCP) (Figure 2) showed a focal common duct dilatation disproportionately large compared to the degree of dilatation of the common hepatic duct and normal intrahepatic radicles. The mass, therefore, represents a choledochal cyst. This condition affects a preponderance of females (81 percent) and is found predominantly in children and young adults. The classic triad of abdominal pain, jaundice, and a right upper quadrant abdominal mass is seen in only 38 percent of patients. Three main varieties of choledochal cyst have been described. Alonso-Lej type A is the most common, representing localized dilatation of the common duct, as in this case. The least common, type C, is a cystic dilatation of the intraduodenal or intrahepatic portion of the duct, a choledochocele. Type B, even more rare, represents a congenital diverticulum connected by a stalk to the common duct, the hepatic ducts, or the gallbladder. Coexisting cholangitis, progressive biliary obstruction, eventual hepatic cirrhosis and portal hypertension, stone formation, and spontaneous rupture, as well as cholangiocarcinoma are all potential complications.

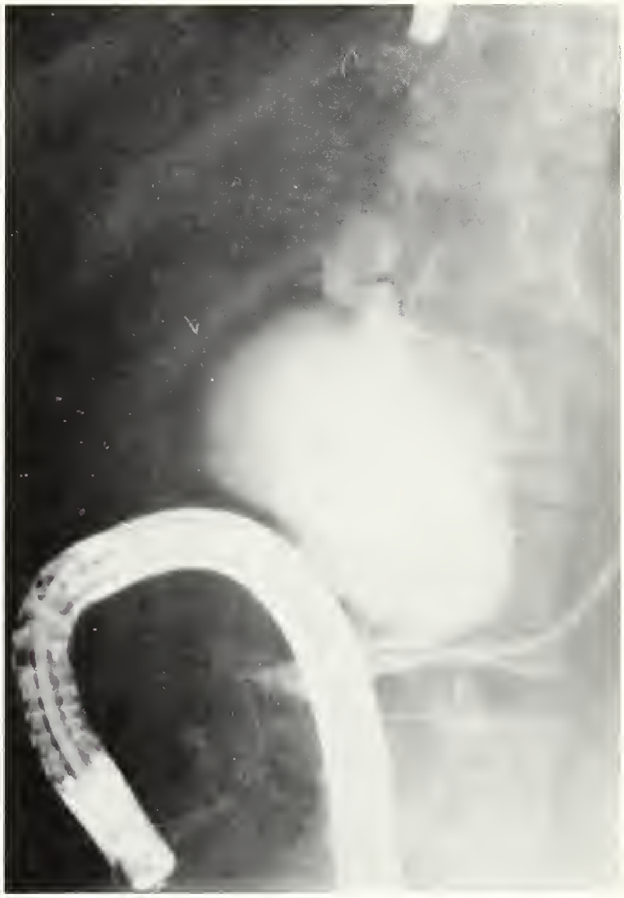

Figure 2. Radiograph from endoscopic retrograde cholangiopancreatogram (ERCP) demonstrating normal pancreatic duct and dilated common bile duct.

This patient had excision of her choledochal cyst and gallbladder in continuity and a choledochojejunostomy, Roux-en-Y, was performed. Postoperatively, the patient has done well with complete disappearance of pain and food intolerance. ■

Radiology Rounds *and its companion,* Radiology Review, *will be a new feature for* NEW JERSEY MEDICINE. *The format will include a radiograph and clinical issue, as well as a brief discussion and diagnosis; selected references will be noted. Contributions to this column are welcome.*

REFERENCES

1. Araki T, Itai Y, Tasaka A: CT of choledochal cyst. *AJR* 135:729-734, 1980.

2. Sarris G, Tsang D: Choledochocele: Case report, literature review, and a proposed classification. *Surgery* 105:408-414, 1989.

3. Lee JK, Sagel SS, Stanley RJ: *Computed Tomography with MRI Correlation, 2nd Edition.* New York, NY, Raven Press, 1989, pp. 560-577.

Golden Merit Award Recipients

At ceremonies held on May 7, 1990, during the 224th Annual Meeting of the Medical Society of New Jersey, at the Sands Hotel, Casino & Country Club, Atlantic City, the following physicians received MSNJ's Golden Merit Award, indicating they held the degree of Doctor of Medicine for 50 years.

Atlantic County

Maurice Bear Gordon, MD	Hahnemann	1940
Josiah Calvin McCracken, Jr, MD	Pennsylvania	1940
John Millerd Naame, MD	Georgetown	1940

Bergen County

Herbert Henry Eccleston, MD	Buffalo	1940
Matthew Feldman, MD	Tulane	1940
Harold F. Hailman, MD	Illinois	1940
Peter George Hunziker, MD	Columbia	1940
John F. W. King, MD	Jefferson	1940
Robert August Kritzler, MD	Cornell	1940
Bernard Ross, MD	Glasgow	1940
Carl Eliot Rothschild, MD	Maryland	1940
Joseph Silber, MD	Lithuania	1940
William Eric Williams, MD	Cornell	1940
Ruth Zuckerman, MD	New York University	1940

Burlington County

William Pinkerton Mulford, MD	Virginia	1940
Alan Murray Schaeffer, MD	Jefferson	1940

Camden County

Robert Arthur Cooper, MD	Temple	1940
Elmer Louis Grimes, MD	Tufts	1940
Magdalena G. Jurado, MD	Santo Tomas	1940
William Donald Kimler, MD	Temple	1940
Chauncey Kay McGeorge, MD	Temple	1940
William J. Snape, MD	Jefferson	1940

Cumberland County

Sherman Garrison, MD	Pennsylvania	1940

Essex County

Marvin C. Becker, MD	New York University	1940
Anthony Richard Bombardieri, MD	Bologna	1940
Peter John Cetta, MD	Hahnemann	1940
Stephen Dmytriw, MD	Georgetown	1940
Frederick W. Douglas, MD	Howard	1940
Robert Eugene Erler, MD	Columbia	1940
John Ralph Evans, Jr, MD	Vermont	1940
Raymond Harold Gehl, MD	Michigan	1940
Bernard German, MD	Harvard	1940

Mehmet Firuzi Goklen, MD .... Istanbul 1940
Albert Edwin Holderith, MD . Georgetown 1940
Joseph Israel, MD .... Edinburgh 1940
Robert Bremer Marin, MD .... Hahnemann 1940
J. Tufton Mason, Jr, MD .... Columbia 1940
Samuel Harry Pomerantz, MD .... Edinburgh 1940
Bernard Sager, MD .... Glasgow 1940
Anthony Michael Sarno, MD* ... St. Louis 1940
Alan Leslie Smith, MD .... Columbia 1940
Charles Hodges Smith, MD .... Temple 1940
Harold Marston Somberg, MD .... Long Island 1940
Spurgeon Sparks, Jr, MD .... Meharry 1940
Irving Leslie Sperling, MD .... New York University 1940
Donald Elwood Stokes, MD .... Cornell 1940
John A. Strazza, Jr, MD .... Cornell 1940
Clifford James Tichenor, MD .... New York Medical 1940
John Robert Tobey, MD ...... Pennsylvania 1940

Gloucester County

Thomas B. Mervine, MD .... Jefferson 1940

Hudson County

Morris B. Feldman, MD .... Tennessee 1940
Herman I. Frank, MD .... Cornell 1940
Sidney Katz, MD .... Scotland 1940
Louis Albert Monica, MD .... St. Louis 1940
Philip Joseph Russillo, MD .... Maryland 1940
H. Albert Scala, MD .... Rome 1940
Edward E. Shapiro, MD .... Virginia 1940

Mercer County

Florante C. Bocobo, MD .... Philippines 1940
Samuel Arnold Guttman, MD ...... Cornell 1940

Middlesex County

Robert William Powers, MD ..... Columbia 1940
John Francis Scalera, MD .... Jefferson 1940
Albert Aaron Schwartz, MD ..... Dalhousie 1940
Murray Wagman, MD .... Toronto 1940
James Sabey Winn, MD .... George Washington 1940

Monmouth County

Milton E. Haut, MD .... Glasgow 1940
Evelyn P. Ivey, MD .... Johns Hopkins 1940
William J. Koch, MD .... Georgetown 1940
Robert George McCurdy, MD .... Temple 1940
Norman Nathanson, MD .... Louisville 1940

Morris County

Albert Abraham, MD .... New York University 1940
Samuel Justin Arnold, MD .... St. Louis 1940
L. Earle Arnow, MD .... Minnesota 1940
Augustus Lynn Baker, Jr, MD .... New York University 1940
Joseph F. Zigarelli, MD .... Yale 1940

Ocean County

Sidney Alpert, MD .... Vermont 1940
Pascal Friscia, MD .... Bologna 1940

Passaic County

Herbert R. Farber, MD .... Virginia 1940
Leo Feld, MD .... Glasgow 1940
John R. Fenwick, MD .... Georgetown 1940
Alex Hochman, MD .... Dalhousie 1940
Richard Elmer Lang, MD ..... Hahnemann 1940
A. Gerard Peters, MD .... New York University 1940
James August Rogers, MD .... Hahnemann 1940
Louis L. Salerno, MD .... Loyola 1940
Aaron Schwinger, MD .... Cincinnati 1940

Somerset County

Godfrey S. Hyer, MD .... Lausanne 1940
Bernard Marcus, MD .... Rush 1940
Harold Nathaniel Wender, MD .... Edinburgh 1940

Union County

Fidel Antonio Aguirre, MD .... Havana 1940
Harold Richard Berger, MD .... New York University 1940
John Paul Cannis, MD .... New York University 1940
Arnold Newman Constad, MD ... St. Louis 1940
Aaron J. Kaycoff, MD .... New York University 1940
Joseph George Palin, MD .... Glasgow 1940
Max Barr Rosenblatt, MD .... Louisville 1940
James A. Wolff, MD .... New York University 1940

*Posthumously

NOTEBOOK

TRUSTEES' REPORT

A meeting of the Board of Trustees was held on April 8, 1990, at the executive offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Committee on Long-Range Planning and Development . . . Adopted the proposed goals and objectives (professionalism; unity; organizational structure; quest for quality; communication and public relations; and legislation) formulated by the Committee, and commended the Committee for its excellent report.

Report of the President . . .

(1) Pam Formica: Candidate for AMA Board of Trustees . . . Complimented Dr. Formica on her campaign efforts.

(2) Speaker and Vice-Speaker . . . Appointed Dr. Karl T. Franzoni as speaker of the House of Delegates and Dr. Edward A. Schauer as vice-speaker of the House of Delegates.

(3) Candidate Nominating Speeches . . . Noted that candidates will have the option to present a statement of intent and purpose if they so desire before the House at the election session.

(4) Representation on the Board of Trustees . . . Referred to the Committee on Revision of Constitution and Bylaws for consideration the matter of the development of a formal mechanism for the inclusion of medical specialty society and hospital medical staff section representatives on the Board of Trustees.

(5) New Jersey State Medical Underwriters, Inc. . . . Noted the following information: the Office of the Chairman, a group that guides the insurance company between meetings of the Board of Directors, is involved with the search for the new president; election of members of the Board of Directors was deferred until the final meeting of the MSNJ Board of Trustees on May 5, 1990; and an ad hoc committee is being formed to serve as liaison between MSNJ and the insurance company, and Dr. Hirsch wil be chairman of the committee.

(6) Academy of Medicine of New Jersey Annual Dinner . . . Noted the date of the annual dinner is May 30, 1990.

(7) Special Dues Category . . . Referred to the Committee on Long-Range Planning and Development the issue of a special dues category for physicians in full-time academic positions, and noted that the chairman of the Committee on Finance and Budget will be invited to participate in the discussion.

Report of Executive Director . . .

(1) MSNJ Paid Membership . . . Noted that paid membership as of March 1990 is 6,508 with 3,441 members also belonging to the American Medical Association.

(2) Financial Statements . . . Reviewed and approved MSNJ financial statements for the period ending February 28, 1990.

(3) April 1990 Medicare Changes . . . Noted that the AMA analysis of all the changes (a 5-year transition to a new payment schedule based on an RBRVS beginning in 1992; a 3-year transition to new balance billing limits beginning in 1991; and the establishment of Medicare volume performance standards beginning this year) in the Omnibus Reconciliation Act of 1989 will be provided to the Board.

(4) State Board of Medical Examiners (SBME) . . . Noted the following items: SBME has petitioned the State Board of Pharmacy to require physicians to file schedule III and IV prescriptions separately so SBME investigators can become more efficient in monitoring physician prescriptions; and a proposed regulation allowing physicians to delegate specified tasks to physician assistants in certain settings.

(5) Litigation . . . Noted the following items: the case of SBME versus Sinha is awaiting a decision by the Appellate Division; the case of MSNJ versus the State Board of Physical Therapy is awaiting a decision of the Appellate Court; and a decision on the MSNJ versus Merin case will be rendered within 30 to 60 days following argument, scheduled for early June.

(6) Legislation . . . Noted the following items: optometric drug use, A-743 (authorize optometrists to diagnose disease and prescribe drugs), moved out of committee; commissioner of health, S-642 (eliminate requirement of a medical license for the commissioner of health), emerged from committee though MSNJ has been actively opposed to the bill; declaration of death, S-1208 (two tests for death would be required, scientific and religious), passed the Senate; and living will, S-1211 (would bring about an operative living will statute), passed the Senate.

Committee on Finance and Budget . . . Approved the following recommendations:

That the budget for the fiscal year beginning June 1, 1990, and ending May 31, 1991, in the amount of $4,286,000 with $2,590,000 to be raised through member assessments be adopted.

That the 1991 assessment be set at $350 per regular dues-paying member. (No change from prior year.)

That the 1991 assessment be set at $60 per member for affiliate members (no longer practicing in New Jersey). (No change from prior year.)

That the 1991 assessment for associate members (interns/residents nonlicensed in New Jersey) and licensed residents, provided the individual is in a residency program entered upon within a reasonable time after his/her graduation for medical school, be set at $25. (No change from prior year.)

That the 1991 assessment be set at $10 per student for medical students. (No change from prior year.)

Committee on Membership Services . . . Postponed consideration of the following recommendation until DocShop, Inc., is a functioning enterprise:

That the Board of Trustees endorse DocShop, Inc., a warehouse club selling medical and dental products to professionals at a discount.

Council on Public Relations . . . Approved the following two recommendations:

That the Board of Trustees urge county medical societies to establish health care programs for senior citizens utilizing physician speakers.

That the Board of Trustees approve the formation of a committee to engage in membership recruitment and retention, with the Council on Public Relations acting in a supportive capacity.

Correspondence . . . Received letters from Charles A. Janousek, executive director, SBME, in response to MSNJ's letter indicating that neither UMDNJ nor its affiliated hospitals should be involved in a pilot project regarding physician assistants; and from James S. Todd, MD, acting executive vice-president of the AMA, expressing assurances of the AMA's commitment to the impaired physicians program. ☐

UMDNJ NOTES

James C. Wallace, assistant chancellor for fiscal affairs of the New Jersey Department of Higher Education, has been appointed associate vice-president for resource management at UMDNJ. Mr. Wallace will be responsible for the University budget, facilities planning, and capital financing. His valuable experience in finance and planning, plus his extensive knowledge of the state system, will be especially helpful as we allocate limited resources while maintaining the excellence of our academic, research, and health care programs. Mr. Wallace will succeed Howard Buxbaum, who has been named executive director for administration and planning at UMDNJ-Robert Wood Johnson Medical School, Piscataway.

UMDNJ is seeking as many as 1,300 volunteers for the largest nationwide study of how heterosexual partners acquire the AIDS virus through sexual contact. The five-year study, coordinated by UMDNJ-New Jersey Medical School, has received a $13.8 million award from the National Institute of Allergy and Infectious Diseases of the National Institutes of Health. The volunteers are being recruited primarily from Newark, Paterson, and Jersey City because these three cities have been identified as having comparatively high numbers of heterosexuals infected with the human immunodeficiency virus (HIV) that causes AIDS. New Jersey is unique among states with large numbers of AIDS cases because 65 percent of the individuals infected with AIDS are heterosexual.

Four hospitals will participate with UMDNJ in the study—UMDNJ-University Hospital and Saint Michael's Medical Center, both in Newark; Jersey City Medical Center; and Saint Joseph's Hospital and Medical Center, Paterson.

Surgical treatment for epilepsy patients is being initiated at the Comprehensive Epilepsy Center of UMDNJ-Robert Wood Johnson Medical Center, New Brunswick. With the addition of the surgical component, the two-year-old Center can provide full-service diagnosis and treatment for epileptics. Approximately 50 patients a year will be able to receive epileptic surgery at the UMDNJ Center. A two-bed monitoring unit has been established at the Robert Wood Johnson University Hospital for the Center's epileptic surgery component. All diagnostic tests, along with surgical procedures, will be performed at the hospital, the core teaching hospital of the medical school.

An ophthalmologist at UMDNJ-Robert Wood Johnson Medical School has developed a surgical technique to allow patients with facial paralysis to open and close their eyes. Dr. David Soll, clinical professor of surgery and ophthalmology at the medical school's Camden campus, developed a surgical technique to treat this problem that involves two steps. First, a small piece of cartilage, taken from the back of the ear, is placed into the inside of the lower eyelid for support. He then inserts a tiny gold weight (about half the size of a dime) to the upper eyelid. The weight forces the eyelid down.

The cartilage improves eyelid function, enabling the patient to open and close the eyelids. The most important factor is finding the right size weight—one heavy enough to close the eye but light enough to allow it to re-open.

Dr. Soll measures the weight by testing different sizes on the outside of the eyelid when the patient is sitting. The patient then is sedated while the weight is installed. An alternative to the gold weight is to attach a spring to the inside of the upper eyelid.

Minor plastic surgery may be needed in some cases to tighten the skin around the eye to ensure complete closure and comfort. Also, it may be necessary to insert a lubricating protective ointment in the eye at night for patients who still have trouble producing enough tears. All patients had improvements in the movement of their eyelids and no serious side effects. ☐ Stanley S. Bergen, Jr, MD

MSNJ AUXILIARY

At the Annual Meeting of the Medical Society of New Jersey Auxiliary, Jane Lorber of Union County was installed as the organization's 64th president. She is the wife of Richard Lorber, MD, a urologist and medical director of clinical research at Schering Plough.

Mrs. Lorber was born and raised in Harrisburg, Pennsylvania, and is a graduate of the Harrisburg Hospital School of Nursing. After completing her training, Jane worked as a surgical nurse at the hospital where she met Dr. Lorber, a surgical intern. They were married in 1974 and have two children, Jennifer, 14; and Brian, 11.

In 1977, shortly after the Lorbers moved to New Jersey, Jane joined the Union County Medical Auxiliary. She immersed herself in Auxiliary activities and projects. Her enthusiasm, energy, and organizational abilities were quickly recognized and she was appointed chairman of various committees and eventually elected to the offices of second- and first vice-president, and president. Then moving on to the state level, Jane served as AMA-ERF chairman, recording secretary, vice-president, and president-elect.

In addition to her Auxiliary work, Jane is active in the community. She is a member of the Scotch Plains Board of Adjustments and the Republican Municipal Committee. She also has served in leadership positions in the PTA, the YMCA, and the Girl Scouts. As a member of the Junior Women's Club, she chaired "Jaws For Life," receiving national acclaim. In 1982, Jane was selected as one of the "Outstanding Women of America." ☐ Marion H. Geib

Jane Lorber, the 64th president of the MSNJ Auxiliary.

PLACEMENT FILE

These physicians are looking for opportunities in New Jersey:

GENERAL PRACTICE

Randi Silverbrook, DO, 3024 Wistar Ct., Bensalem, PA 19020. College of Osteopathic Medicine 1985. Partnership or group. July 1990.

Leonid Belopolsky, MD, 955 Chanticleer Dr., Cherry Hill, NJ 08003. Moscow 1961. Board certified (ANES). Also, internal medicine. Available.

INTERNAL MEDICINE

Leonid Belopolsky, MD, 955 Chanticleer Dr., Cherry Hill, NJ 08003. Moscow 1961. Board certified (ANES). Also, general practice. Available.

David D. Gross, MD, 1045 Liberty St., Apt. 1, Trenton, NJ 08611. St. George's University (Grenada) 1987. Board eligible. Available August 1990.

Marc Kesselhaut, MD, 1 Rustic Ridge, C16, Little Falls, NJ 07424. St. George's University 1986. Board eligible. Solo or partnership in Mercer, Somerset, Burlington, Hunterdon, or Middlesex counties. Available September 1990.

Suresh Reddy, MD, 3301 Cobblestone Cir., #6, Waterloo, IA 50703. Kakatiya (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

NUCLEAR MEDICINE

Haresh P. Solanki, MD, 3 West Elm St., Islip, NY 11751. MP Shah Medical College (Iran) 1980. Board eligible. Group or hospital-based. Available July 1990.

PATHOLOGY

Judith Vople, MD, 106 Orlando Blvd., Toms River, NJ 08757. UMDNJ 1985. Board eligible. Group or hospital-based. Available July 1990.

PHYSICAL MEDICINE

Robert B. Thorne, MD, 112 Woodside Ave., Trenton, NJ 08618. Rutgers 1980. Board certified. Part time or full time. Available.

CONTINUING EDUCATION

INFECTIOUS DISEASE

July

18 **Clinical Management of HIV Infection**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ and NJDOH)

27 **Clinical Management of HIV Infection**
12 Noon-1 P.M.—Medical Center of Ocean County, Point Pleasant
(AMNJ and NJDOH)

August

21 **Clinical Management of HIV Infection**
7:30-8:30 A.M.—Mercer Medical Center, Trenton
(AMNJ and NJDOH)

21 **AIDS Training and Resource Program**
8-9 A.M.—Wallkill Valley Hospital and Health Center, Sussex
(AMNJ and NJDOH)

MEDICINE

July

3 **Grand Rounds**
10 8:30-10 A.M.—Elizabeth General
17 Medical Center, Elizabeth
24 *(Elizabeth General Medical*
31 *Center)*

6 **Cardiovascular Effects of rhIGF-I in Normal Subjects**
2-3 P.M.—Ciba-Geigy, Summit
(Ciba-Geigy)

10 **Occupational Lead Poisoning in New Jersey**
12:15-1:30 P.M.—John Fitch Plaza, Trenton
(NJDOH)

11 **Anti-Hypertensive Therapy: Benefits Beyond Blood Pressure Control**
1-2 P.M.—Deborah Heart and Lung Center, Browns Mills
(Deborah Heart and Lung Center)

11 **Diagnostic Uses of MRI**
1-2:30 P.M.—RCHP, Route 1, New Brunswick
(RCHP)

24 **Medical Aspects of Rabies**
12:15-1:30 P.M.—John Fitch Plaza, Trenton
(NJDOH)

26 **Chronic Pain Management and Issues Related to Iatrogenic Addiction**
8-9 P.M.—Freehold Area Hospital, Freehold
(AMNJ)

August

7 **Grand Rounds**
14 8:30-10 A.M.—Elizabeth General
21 Medical Center, Elizabeth
28 *(Elizabeth General Medical*
Center)

7 **Topics in Public Health**
12:15-1:30 P.M.—John Fitch Plaza, Trenton
(NJDOH and AMNJ)

16 **New Treatment Modalities and Implications for the Future of Diabetes**
7:30-8:30 P.M.—Freehold Area Hospital, Freehold
(AMNJ)

ONCOLOGY

July

12 **Tumor Board**
9-10 A.M.—Irvington General Hospital, Irvington
(Irvington General Hospital)

13 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley Hospital Center, Sussex
(Wallkill Valley Hospital Center)

August

9 **Tumor Board**
9-10 A.M.—Irvington General Hospital, Irvington
(Irvington General Hospital)

10 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley Hospital Center, Sussex
(Wallkill Valley Hospital Center)

PSYCHIATRY

July

3 **Psychiatry Grand Rounds**
10 8:30-10 A.M.—Elizabeth General
17 Medical Center, Elizabeth
24 *(Elizabeth General Medical*
31 *Center)*

5 **Treatment Approaches To Obsessive Behavior**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

12 **Light at the End of the Tunnel**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

19 **The Violent Patient**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

25 **Treatment of Borderline Personality Disorder**
1:30-2:30 P.M.—Trenton Psychiatric Hospital, Trenton
(Trenton Psychiatric Hospital)

August

2 **NMR: Application to Affective Illness and Lithium**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

7 **Psychiatry Grand Rounds**
14 8:30-10 A.M.—Elizabeth General
21 Medical Center, Elizabeth
28 *(Elizabeth General Medical*
Center)

9 **Foods, Fats, and Fraud Diets**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

16 **Food and Fitness Habits**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

30 **Brain Imaging and the Electroconvulsive Patient**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

SURGERY AND ITS SPECIALTIES

July

26 **High-Risk Surgery**
11:30 A.M.-12:30 P.M.—United Hospitals Medical Center, Newark
(AMNJ)

IN MEMORIAM

Paul Aptekar. A pediatrician involved in community projects for many years, Paul Aptekar, MD, died at the age of 61. Born in the Bronx, New York, Dr. Aptekar received his medical degree from the University of Mexico, Mexico City, in 1957 and his license to practice medicine in Mexico the same year. Dr. Aptekar served his internship and his residency in pediatrics at Kings County Hospital, New York. In 1960, he received his New Jersey medical license. Dr. Aptekar had a private pediatrics practice in Lakewood and was affiliated with Kimball Medical Center, Lakewood. In addition, Dr. Aptekar was a member of our Ocean County component.

Neil Castaldo. A longstanding member of 50 years of the Medical Society of New Jersey, Neil Castaldo, MD, died on March 27, 1990, at the age of 81. Dr. Castaldo was born in Bayonne, on September 23, 1908, and earned his medical degree from St. Louis University School of Medicine, St. Louis, in 1933. He served his internship at Bayonne Hospital, and his residency at Jersey City Medical Center, and received his New Jersey license in 1934. Dr. Castaldo was a surgeon and a general practitioner and the medical inspector for the Cranford Board of Education for many years. He also was affiliated with Rahway Hospital, and with St. Elizabeth Hospital, Elizabeth. Active in school health examinations, Dr. Castaldo served as chairman of the special committee on school health for the Medical Society of New Jersey and published an article, "Toward Better School Health Examinations" in *NEW JERSEY MEDICINE.* Dr. Castaldo served in the United States Army Medical Corps during World War II from 1942 to 1943 and attained the rank of captain. He was stationed at the Walter Reed Army Medical Center, Washington, DC. Dr. Castaldo was a member of the American Medical Association and of our Union County component, and a fellow of the International College of Surgeons.

Italo J. Falcone. Word has been received of the death of Italo John Falcone, MD, on March 21, 1990, in Italy, where he spent his latter years. Dr. Falcone, born on March 6, 1923, in Newark, received his medical degree from University of Milano, Italy. In 1950, Dr. Falcone received his New Jersey license. He served an internship at St. Peter's Medical Center, New Brunswick. Dr. Falcone had a general surgical practice in New Brunswick and was affiliated with two New Brunswick hospitals, St. Peter's Medical Center and Robert Wood Johnson University Hospital. Dr. Falcone was a member of our Middlesex County component and of the Italian Medical Society.

Melvin W. Lipowitz. We have received word of the death of Melvin W. Lipowitz, MD, on April 11, 1990, at the untimely age of 54. An internist, Dr. Lipowitz earned his medical degree from Georgetown University School of Medicine, Washington, DC, in 1964 and received both his New Jersey and New York licenses the following year. He served an internship at Newark Beth Israel Medical Center, Newark. Born in Newark on September 9, 1935, Dr. Lipowitz had his private practice there and was affiliated with several hospitals: Rahway Hospital, Newark Beth Israel Medical Center, and John F. Kennedy Medical Center. He was a member of the American Medical Association, of our Essex County component, and of the New York Academy of Sciences.

Robert W. Powers. Born on September 1, 1914, in Rome, New York, Robert William Powers, MD, died on January 10, 1990, at the age of 75. A retired general surgeon, Dr. Powers received his medical degree from Columbia University College of Physicians & Surgeons, New York. After serving in the United States Army Medical Corps during World War II from 1942 to 1945 as captain, Dr. Powers obtained his New Jersey license in 1949. Dr. Powers had a private surgical practice in New Brunswick, and was affiliated with two New Brunswick hospitals: St. Peter's Medical Center, and Robert Wood Johnson University Hospital. He was a member of our Middlesex County component, of the American Medical Association, and of the Academy of Medicine of New Jersey.

Send member obituaries to:
Membership Department, MSNJ
Two Princess Road, Lawrenceville, NJ 08648

EDITORIAL CRITERIA

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Content. The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports; review articles; clinical notes; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and opinions. Editorials are prepared by the editor and by guest contributors on timely and relevant subjects. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevant to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made to an audience in New Jersey.

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The author should submit a 30-word abstract.

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2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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NEWSWATCH

PRO VERSUS MSNJ

On May 21, 1990, the federal district court issued the following rulings in the PRO case:

1. PRO is entitled to communicate directly with doctors to initially notify them a potential problem exists in furtherance of PROs contractual and statutory obligations.
2. As a matter of law, there is no reason why a doctor's response must be done personally for PRO to consider it. Likewise, there is no reason why a response made by counsel who has been retained to represent a doctor during the review process is not binding on the doctor.
3. PRO's motion to prohibit the Medical Society of New Jersey from deposing Mr. Madden and Mr. Margolies is denied.

As the prevailing party in this case, MSNJ now is applying for attorney's fees.

MEDICAL WASTE REGISTRATION/REFUNDS

Refunds are due to physicians by July 2, 1990. The state mailed refund applications to doctors for clarification of refund entitlement status; only 60 percent responded. The remaining 40 percent will be recontacted; refunds will not be processed unless physicians provide the requesting data to the Department of Environmental Protection. The money will revert to the state unless properly claimed. Annual report requests will be mailed out shortly as well as the 1990 renewals.

PHYSICIAN ASSISTANTS

The State Board of Medical Examiners has proposed a rule to authorize the use of physician assistants in New Jersey. The Society is opposed to that action and has retained former federal Judge Herbert S. Stern to represent the membership.

A public hearing will be held on August 15, 1990, in Trenton. Physicians opposed to the State Board rule should plan to attend and should send comments in opposition to Michael Grossman, DO, President, New Jersey State Board of Medical Examiners, 26 West State Street, Trenton, NJ 08625.

TODD NAMED AMA CHIEF

James S. Todd, MD, of Ridgewood, a former chairman of the Board of Trustees of MSNJ and NJSMU, was named executive vice-president of the AMA on June 20, 1990. Replacing retiring James Sammons, MD, Dr. Todd is expected to preside over a restructuring and redirection of the AMA.

MSNJ NEWSLETTER

1990 CODES FOR MEDICARE

Medical Administration Publications announced the release of the newly revised *1990 HCPCS Level II National Codes.* A supplement to CPT, the codes in this manual are used to report supplies and injections to Medicare. This publication is fully indexed and set up like CPT for ease of use. Symbols identify new, revised, and deleted codes. An introduction explaining how and when to use these codes is provided for your reference. And the spiral binding keeps the book open, making it even easier to use. If you report supplies or injections to Medicare or Medicaid, you need these codes. Copies of this 228-page publication may be obtained from Medical Administration Publications (MAP), 671 Executive Drive, Willowbrook, IL 60521. The cost of the book is $28 plus $3.50 for shipping and handling.

AMA HEADQUARTERS MOVE

The staff of the AMA will be moving into leased space in a new headquarters building in Chicago in August. The new address is 515 North State Street, Chicago, IL 60610. The general office phone number will be 312/464-5000.

HANSEN'S DISEASE PROGRAM

The Regional Hansen's Disease Program provides medical services to Hansen's disease patients throughout the United States. In order to achieve the program's goal of providing care in each patient's community, a nationwide network of over 900 physicians has been developed. Network physicians represent numerous medical specialties and have varied backgrounds, but share a common interest in managing Hansen's disease patients. There are approximately 6,000 patients with Hansen's disease living in the United States today. The Regional Hansen's Disease Program has identified 3,700 of these patients as currently being under treatment. Physicians who choose to utilize the program's resources can obtain medications, patient education materials, insensitive limb screening materials, and clinical literature at no charge. Any physician with an interest in managing Hansen's disease patients can be placed on the program's referral list. Interested physicians should contact Mr. Larry Pfeifer, clinical coordinator, at 1/800/642-2477.

NJ HEALTH CARE SPENDING

According to a report by Citizens Action, New Jersey spends more per person on health care than any nation, other than the United States. The report was based on information from 1982 to 1986 provided by the Health Care Financing Administration and the Organization for Economic Cooperation and Development of the United Nations. According to the data, New Jersey spends $1,643 per person per year, compared to $2,051 for the United States and $1,515 per person for Canada, the number 2 ranked nation in per capita health spending.

HEALTH COMMISSIONER

The Senate recently approved a bill that allows for future nonphysician commissioners of health. The bill would allow for this as long as one of the deputy commissioners is a physician. By allowing for nonphysicians, a wider range of qualified individuals may apply for the position. The new bill (S-642) does require that the commissioner be trained and experienced, and hold an advanced degree in the public health field.

Additionally, the candidate must have five years of full-time administrative or executive experience with a public health agency and some experience in community health facilities planning. The bill must be passed by the Assembly.

CHAPTER 83 HOSPITAL PROFILES

Hospitals now are required to submit an updated profile to the Hospital Rate-Setting Commission before it will take action on any hospital's schedule of rates. The updated profile statistics and other relevant financial information must be through 1989 and should be submitted in writing no later than one week prior to the scheduled Commission meeting date.

REVIEW DRG PAYMENT SYSTEM

New Jersey Hospital Association (NJHA) President Louis P. Scibetta has announced the creation of a task force, comprised of 16 New Jersey hospital executives and trustees, to review the current health care regulatory scene. The task force will develop a document that could be used as part of a state master plan on how hospital rates are set, how hospitals operate in New Jersey, and who pays for the health care costs of the poor. The task force will be named the "President's Task Force on Regulatory Reform," will report to the NJHA Board of Trustees, and present its recommendations to Governor Florio. The task force will examine such items as New Jersey's diagnosis related group hospital payment system, the certificate of need system, rewarding hospitals for efficient operations, encouraging the development of less costly outpatient services, and assuring access to care regardless of ability to pay.

DEPARTMENT OF HUMAN SERVICES

Commissioner Alan Gibbs's first priority will be a review of the entire operations of the Department of Human Services. The review will encompass the 23,000 employees of the Department, as well as services provided to the one million clients of the Department. The Commissioner's immediate focus will be on the 658-person central office.

HEALTH CARE STUDY

On April 20, 1990, Governor Florio announced the appointment of an 18-member health care commission to study the health care crisis in New Jersey. The commission is comprised of six state cabinet members, two legislators, and nine members of the public. The six cabinet members include Human Services Commissioner Alan Gibbs, Health Commissioner Dr. Frances Dunston, Insurance Commissioner Samuel Fortunato, Labor Commissioner Raymond Bramucci, Public Advocate Wilfredo Caraballo, and Treasurer Douglas Berman. The two commission members from the legislature are Senator Richard Codey (D-Essex) and Assemblyman James McGreevy (D-Middlesex). Brenda Bacon, head of the Governor's Office of Planning and Management, will chair the commission.

PHYSICIAN ASSISTANTS

By a unanimous vote, the State Board of Medical Examiners approved in principle a two-year pilot program allowing physician assistants to work in teaching hospitals and state institutions. Physician assistants also would serve as the first or second surgical assistant on minor procedures. Physician assistants are trained and practice in the same manner as military paramedics, and act much like hospital residents in other states. New Jersey is the only state that does not allow the use of physician assistants, which has been opposed in the past by physician and nurse groups.

PHYSICIAN PAYMENT INCREASE

According to Health and Human Services Chief Louis Sullivan, MD, proposed Medicare physician payments will increase by only 9.9 percent in 1991 due to budgetary constraints. HHS's 9.9 percent increase proposal to Congress on the Medicare Volume Performance Standard (MVPS) includes an inflation increase of 3.6 percent, an enrollment increase of 1.2 percent, and unquantified factors for an aging beneficiary population, utilization changes, access difficulties, and new technology. MVPS, a part of overall 1989 physician payment reform initiatives, is intended to slow the rate of spending increase for physician services from its current 12 percent annual trend. In addition to the overall expenditure target, HHS plans to limit growth of surgical and other physician payments to 8.7 percent and 10.5 percent, respectively.

BOEHM PORCELAIN

At her New Jersey studio, Helen F. Boehm (left) presents one of her world-famous porcelains to Palma E. Formica, MD (right). Mrs. Boehm donated the exquisite piece as a prize in a raffle held for Dr. Formica's election campaign. Dr. Formica is running for a position on the AMA Board of Trustees.

MEDICAL INFLATION UP

Medical inflation rose 0.8 percent in March as compared to a 0.5 percent increase in the overall consumer price index, according to the Labor Department. March price increases included a 1.1 percent increase in hospital room rates and a 0.7 percent increase in outpatient fees. These increases compared to respective February increases of 0.5 percent and 1.4 percent.

PHYSICIAN PAYMENT REFORM

The Physician Payment Review Commission (PPRC) criticized the Administration's attempt to accelerate the Physician Payment Reform program. Concerns were voiced by the PPRC that trying to implement the program too quickly could throw the whole process of payment reform out of kilter and would not provide a suitable time frame within which to encourage private insurers to join with the government program.

DOCTORS LEAVING MILITARY

According to a study by the General Accounting Office, low salaries are driving physicians from military service into civilian life where they can find the dollars to meet their needs. The demand for administrative chores and the inability to always practice their specialty also added to the reason some 2,000 out of 13,000 doctors left the service in 1988. GAO urges Congress to increase the salaries of military physicians.

MALPRACTICE COSTS Arguing over whether medical malpractice costs increase the cost of health care, the doctors and lawyers compiled the statistics. The comptroller general of the General Accounting Office stated that from 1983 to 1985 the cost of medical malpractice insurance increased over 60 percent to approximately $1.3 billion. Dr. James S. Todd, acting executive vice-president of the American Medical Association indicated that because of the fear of claims and lawsuits, physicians are performing more tests and procedures, and as a result, health care costs increased by $19.3 billion in 1988. President of the Association of Trial Lawyers of America, Russ Herman, noted that the cost of a malpractice lawsuit was less than 1 percent of the total health care cost in 1987.

HOSPITAL CLOSINGS According to data compiled by the American Hospital Association, 65 hospitals closed during 1989 compared to 12 hospitals opening. Texas experienced the highest number of closings with 13 during 1989, followed by Colorado with 6 and Mississippi with 5. Seven of the 12 hospitals that opened during 1989 were reopenings of hospitals that previously had closed, while 16 of the facilities that closed in 1989 continue to offer outpatient services. Rural hospital closings amounted to 44 of the 65 closings in 1989. The number of hospital closings was 85 in 1988 and 77 in 1987, while 508 hospitals closed during the decade.

OUTPATIENT SURGERY In a report to Senator Jay Rockefeller (D-WV), and Representative Peter Stark (D-CA), the General Accounting Office (GAO) concluded that Medicare can reduce overpayments for outpatient surgery by implementing a prospective payment system now as opposed to waiting for widescale reform. GAO has suggested deducting coinsurance from allowable costs rather than allowable charges, and not holding coinsurance to 20 percent of allowable charges, as two alternatives for achieving savings.

CLEAN AIR BILL Representative Robert Dole (R-KS) has introduced an amendment to the revised clean air bill that will establish less stringent standards for hospital incinerators than those required for municipal waste-burning plants. The amendment will ensure that hospitals still can use on-site incineration. The Senate's original measure would have increased hospital incineration and maintenance costs by $412 million annually, or $91,500 per hospital. The Senate bill passed on an 89-11 vote margin.

HOSPITAL PRICES Health Care Investment Analysts, an investment research firm, has found that hospital competition increases costs and charges as hospitals add services to attract physicians and patients. The study focused on more than 2,000 hospitals in three markets: markets with one hospital, markets with two or three hospitals, and markets with four or more hospitals. Costs were 17 percent greater for hospitals in markets with four or more facilities than markets with one hospital, while charges were 24 percent greater in markets with more than three hospitals compared to those areas with only one hospital.

INSURANCE COMPANY REQUESTS It has become common for insurance companies to request additional patient information beyond the completion of claim forms. The Board of Trustees of the Medical Society of New Jersey believes that New Jersey physicians are entitled to compensation for the time spent in providing this information. You should notify the patient and the carrier that the extra service will involve a charge, and that the written authorization of the patient must be on file in your office before you can proceed.

FINI "There is no softer pillow than a clear conscience."

PROFESSIONAL LIABILITY

PRACTICING MEDICINE WITHOUT A LICENSE

A physician was properly convicted of delivering a controlled substance and practicing medicine without a license, a Michigan appellate court ruled. The physician was convicted of delivery of a controlled substance for other than legitimate and professional therapeutic purposes on January 19, 1982. He was placed on probation and forbidden to hold a controlled substance license during his probation. After his conviction, he made arrangements with another physician to continue his practice during his suspension.

The other physician had a DEA license and prescribed phentermine for his diet control patients. On April 25, 1982, he delegated authority to the office staff and the physician on probation to refill maintenance prescriptions for patients who still were overweight but who had no particular problems and who previously had been prescribed a maintenance dose by a licensed physician. The written authorization was given pursuant to state law.

A sheriff's narcotics officer and a police informant contacted two of the physician's longtime patients. They agreed to provide the money and transportation to the physician's office if the patients would refill their prescriptions for diet pills and split the pills with the officer and the informant. Neither patient knew that the informant and the officer were associated with the sheriff's department in any way.

The physician refilled the prescriptions, and the patients gave the agreed share to the officer. The pills were turned over to the police laboratory, where they were identified as phentermine, a schedule IV controlled substance.

After an appellate court ruled that the other physician could not as a matter of law delegate his authority to the physician on probation, a trial court convicted him on two counts of delivering controlled substances and one count of practicing medicine without a license. Affirming the stated decision, the appellate court said that the physician was not the victim of entrapment. (Reprinted with permission from *The Citation,* American Medical Association, Vol. 60, March 15, 1990)

HOSPITAL CAN SEEK INDEMNITY FROM RADIOLOGIST AND CORPORATION

A settlement agreement between a patient and a radiologist did not preclude a hospital's claim for indemnification from the radiologist and her radiological services corporation, a Louisiana appellate court ruled.

The patient sustained a back injury at work on January 10, 1978. He was taken to a hospital and x-rayed. Since the hospital did not have a resident radiologist, the x-rays were sent out to be read. A radiologist read the x-rays, but failed to diagnose a fractured cervical vertebra. The patient claimed that the failure of the radiologist to interpret the x-rays properly contributed to development of paralysis.

During the course of litigation, a settlement was reached between the patient, the radiologist, and her insurance company. After the radiologist and her insurance company were dismissed from the action, the hospital sought to add the radiologist, her insurance company, and her professional corporation as third-party defendants. A trial court granted summary judgment dismissing the third-party complaint, and the hospital appealed.

Reversing the trial court's decision, the appellate court said that the radiologist failed to establish that releasing her released her professional corporation. The settlement agreement between the patient and the radiologist did not preclude the hospital's claim for indemnification from the radiologist and her professional corporation, the court said. (Reprinted with permission from *The Citation,* American Medical Association, Vol. 60, April 1, 1990)

DOCUMENT RESTRICTIONS BY THIRD-PARTY PAYERS

Economic pressures may increase your risk for malpractice allegations of failure to diagnose and failure to refer. Physicians often ask how they might prevent such allegations of negligence when the plan (with which he contracts) inhibits the ability to order tests, restricts referrals, or economically penalizes the physician for providing needed care. If you see Medicare patients or belong to a PPO, IPA, or HMO, sooner or later you may face this problem.

In the case of a bad outcome, who is held accountable for medical care decisions—the plan or the physician? Our experience has shown that the physician often bears the major burden of such claims in dollars, time, and emotional distress. How can you guard against these allegations? On a case-by-case basis, consider the following suggestions:

1. Write your recommendations, rationale, and consequences of not following your recommendations to the plan administrator with a copy to the patient.

2. Stand by your recommendation, communicating to the patient the importance of the proposed care and the perceived consequences of not proceeding as recommended. Urge the patient to obtain needed care even if such care will not be covered by a medical plan.

3. Document in the patient's chart, objectively and without editorial comment, all efforts to convince the patient and the plan administrator. If both refuse, use your best medical judgment to either: proceed with care within the parameters allowed; or terminate the physician-patient relationship if other providers are available to accept transferred care within the guidelines of the plan. Explain to the patient your concern that you cannot continue to provide care against your own best judgment.

(Reprinted with permission from *Medical Legal Alert,* January 1990, published by Mutual Insurance Company of Arizona)

PROFESSIONAL LIABILITY

James E. George, MD, JD, is director of the Department of Professional Liability Control, Medical Society of New Jersey, and A. Ronald Rouse is director of Special Projects, Medical Society of New Jersey.

Please address all comments and concerns to A. Ronald Rouse, Director of Special Projects, Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648. Mr. Rouse also can be reached by calling 609/896-1766, at Medical Society of New Jersey headquarters in Lawrenceville.

EDITOR'S DESK

POTPOURRI

Many of us have resisted utilizing the spate of technologic marvels developed in recent years. Some of us are computer illiterate, put to shame by our children and our grandchildren, despite the widespread use of these devices in offices and in hospitals. (The problems associated with down time—all too frequently—tend to perpetuate this illiteracy.) Even programming a VCR seems beyond the capabilities of some, regardless of the detail or simplicity of the manual supplied.

But many who are resistant to these gadgets have succumbed to simpler instruments—cordless telephones and, especially, telephone answering machines. Once used, we wonder, "How did we ever do without them?" They are convenient and do prevent the loss of important messages. The initial resistance to the employment of answering machines seems much abated as their numbers have escalated. But the use of recorded solicitations still provokes involuntary banging down of the receiver. And we do have glitches when rerecording messages.

In keeping with the proliferation of home and business answering machines, we also have noted the development of computerized telephone answering in hospitals and other businesses: "If you know the extension of the department you are calling, press X. If you do not, wait for an operator." And, where are those extension numbers—on a paper filed away with other important documents or on a wallet-sized card with digits so miniscule as to require a magnifying loupe? Could we not return to the personal touch of an operator or be furnished with plasticized cards containing numbers that do not strain these old tired eyes?

IN MEMORIAM: PETER SWEETLAND

The annual meeting of the Physician Insurers Association of America (PIAA) was dedicated to Peter Sweetland, late president of the New Jersey State Medical Underwriters, Inc. and a founding father of the Medical Inter-Insurance Exchange of New Jersey and PIAA. Many tributes were given and it seems appropriate to publish the following one from James S. Todd, MD: "How does one assimilate the loss not only of a treasured friend, but a person who contributed so much to the medical profession in his quiet, gentle way. Pete and I worked closely together for over ten years, and never during that time did I see him lose his patience, become discouraged, or disparage anyone or anything. Even more remarkable, during that time was the development of a unique relationship between those with whom he worked, and a unique understanding of the needs of the profession he was serving so faithfully. His ability to translate the complicated to the simple, the adverse to the possible, and the doubters to the believers was phenomenal. Yet it was Pete himself who was so extraordinary. He died as he lived, steadfast to the task, never complaining, never willing to say enough, and by so doing leaves a legacy toward which we should all aspire: devotion to family, devotion to his work of excellence, and devotion to his friends. We all, especially I, have lost one who not only was my teacher, but one of the truest friends any person could have. Rest in peace, Pete, and know you were loved." So say we all. ☐

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Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalmic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon® is indicated as a sympathicolytic and mydriatric. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.[1,2] Also dizziness, headache, skin flushing reported when used orally.[1,3]

Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.[1,3,4] 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.[3]

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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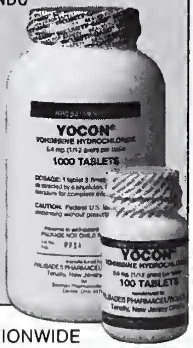

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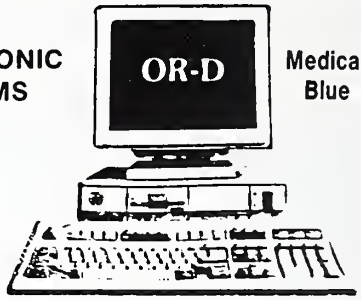

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BOOK REVIEWS

CLINICAL IMPLICATIONS OF ABNORMAL DIGESTIVE TRACT RADIOGRAPHS

David A. Morowitz, MD. Philadelphia, PA, Lea & Febiger, 1990. In this book, Dr. Morowitz is limiting his discussions to the clinical implications of abnormal digestive tract radiographs-barium studies, cholangiograms, and plain films of the abdomen. There are no detailed discussions of radioisotopic techniques, imaging studies such as sonography, computerized abdominal tomography, or magnetic resonance imaging. Indeed, there is not a single endoscopic picture.

Dr. Morowitz presents brief discussions, clinical vignettes appropriate to the particular gastrointestinal problem illustrated by one to three pertinent x-rays. His aim is "to serve the reader as a kind of tell me now what I need to know survival kit." There are no references. Unfortunately, the reader may need to know more about some of these clinical problems. I feel a few key references would be an invaluable tool to direct the reader in the right direction.

Although I found most of the discussions well written, neat, and thoughtful, there were some suggestions I questioned. I feel that metronidazole is a more appropriate alternative to oral vancomycin in the management of pseudomembranous colitis than either trimethoprim-sulfamethoxazole or corticosteroids.

The material presented should be familiar to experienced gastroenterologists and radiologists. However, those readers who are in the process of developing diagnostic and clinical skills in gastroenterology will find the format informative and practical. I recommend the book to students and residents taking a gastrointestinal rotation. It also will be useful to internists and family practitioners who see large numbers of common digestive problems. □ Joel D. Levinson, MD

IRRITANT CONTACT DERMATITIS

E.M. Jackson and R. Goldner (editors). This text fulfills a unique niche in the collation of information associated with irritant contact dermatitis. In a review of the literature, there is a plethora of information and immunological research regarding allergic contact dermatitis. However, irritant contact dermatitis has been superficially investigated. This text brings together the available literature into a single cohesive volume.

The text is divided into three parts: inflammation; exposure to irritants; and diagnosis and testing for irritants. The first part, comprised of three chapters, is an evaluation of the inflammatory response. The second part, composed of four chapters, discusses exposure to irritants in the occupational setting, in cosmetic and topical drug therapy, and in plants. Finally, diagnosis of irritant contact dermatitis is developed in three chapters on in vitro and in vivo clinical tests, and clinical tests to identify compounds with the potential to cause irritation.

The textbook is recommended to complement the library of dermatologists and allergists/immunologists interested in the study of immunodermatology, and physicians involved in occupational medicine. □ Leonard Bielory, MD

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Lyme Disease in New Jersey

The explosive growth in the number of reported cases of Lyme disease in New Jersey is astonishing. Therefore, it is imperative for all physicians to understand how to prevent exposure and to recognize early signs of the illness in order to develop appropriate treatment.

An interdisciplinary symposium on Lyme disease recently was sponsored by UMDNJ-Robert Wood Johnson Medical School, the New Jersey Veterinary Medical Association, the New Jersey State Nurses Association, and the New Jersey Health Officers Association. This symposium was part of a new clinical prevention initiative created by UMDNJ-Robert Wood Johnson Medical School faculty. The initiative is designed to have a positive impact on the preventive aspects of care provided by physicians practicing in New Jersey.

In this special issue, we highlight the major papers from the two-day conference on Lyme disease, to help our readers explore the disease and to review and update diagnostic and treatment protocols.

The audience at the two-day symposium listens attentively to the presentations. Speakers include (top to bottom): Drs. Mary Swigar, John Post, and Anita Curran. © A.J. Sundstrum

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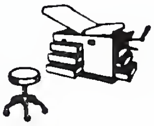

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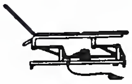

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Lyme Disease: Prevention and Control

ANITA S. CURRAN, MD, MPH

The author describes a public health education program directed at Lyme disease prevention and control. This program, conducted from 1983 to 1989, argeted three major segments of the community—the general public, health care providers, and elected officials.

Research into the etiology and epidemiology of Lyme disease has produced significant results over the last decade. Much has been earned, but there is much about the detection, revention, and control of this disease that still ludes us. The sensitivity and specificity of readily vailable laboratory tests still is less than would be esired. Treatment is problematic and a safe and ffective vaccine is years away.

The only reliable method of preventing Lyme disase is the prevention of tick bites; to date, there is no safe, effective, and practical method of large-scale tick control. As a consequence, control of this disease must be approached with an intense public health education campaign.

This paper describes a campaign developed and conducted by the Westchester County Health Department during the years 1983 to 1989. Westchester County, New York, is one of the areas most severely impacted by Lyme disease in the northeastern United States. The first few cases were diagnosed in 1981. The commissioner of health directed that a major public health education campaign be developed to alert the public and the health care practitioners to this growing menace. To be successful, this campaign had to be waged along several battlefronts simultaneously: the community; health care professionals; and elected officials. The messages had

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to be consistent and integrated; there would be some individuals who belonged to all three groups.

THE COMMUNITY

To alert and educate the community, messages were sent over a variety of channels to reach identified risk groups, i.e. children (the highest risk group); employee groups; and the community at large. The community messages included basic information about the disease and the identified vector; ways to avoid exposure; proper methods of tick removal; signs and symptoms to look for; and instructions to seek medical advice immediately if in doubt.

Risk Group 1—Children. Children were accessed through schools, summer camps, and clubs. In the early spring, half-day seminars on Lyme disease were conducted for school nurses. Teachers were provided with a teaching supplement developed in conjunction with several business and educational groups. Classroom activity sheets were developed and distributed. Speakers were made available to parent/teacher groups and students. A tickbusters tee-shirt was developed and children were encouraged to become tickbusters. A video was produced with two children showing methods of defensive dressing. Large tabletop displays were constructed and rotated on loan throughout the school system.

Speakers made presentations at meetings of Girl Scouts, Boy Scouts, and other interested youth groups; videos and the tabletop displays were made available to program directors.

Because the Health Department provides operating permits for private and public summer camps in Westchester County, it was mandatory for camp directors to attend a day-long workshop on camp safety prior to the beginning of each camp season. A session on the recognition and prevention of Lyme disease was a required component of that seminar. At summer camp inspections, sanitarians from the Department talked to camp counselors, reinforcing the messages given the camp directors during the preseason workshops, and literature was presented for the counselors and campers.

Risk Group 2—Employees. Employee groups were accessed at their place of employment. Educational programs were presented by staff, particularly to those at high occupational risk, such as parks and public works employees, or those whose place of employment was in a high-risk area.

Risk Group 3—General Public. Several approaches were used to reach the general public. An intensive campaign was initiated to attract broad media coverage. Press releases were generated, photo opportunities were created, and reporters were invited to go out into the field and were provided with photos of ticks, as well as live and preserved specimens.

Photo courtesy of Gibbs-Soell Public Relations.

Adult male and female deer ticks.

Key staff appeared on news programs. During summer 1988, the health commissioner was interviewed on *CBS Nightline* and on the *McNeil/Lehrer* news hour. In addition, a number of national magazines, including *Sports Illustrated, Good Housekeeping, Self,* and *Consumer Reports* wrote articles on this program.

Public forums were conducted in the evenings during the peak Lyme disease seasons in areas of high-disease prevalence. The forums provided opportunities for the public to ask questions and with media coverage, had an impact beyond the group in attendance.

In an effort to define the scope of the problem, a tick surveillance and identification program was begun in 1984. As a service to the community, ticks sent to the Department were identified. This was both educational and helpful in epidemiologic studies, confirming that most ticks were acquired on the property of the resident, and that it was not necessary to go into heavily wooded areas to acquire Lyme disease. Surveys of *Ixodes* density in county parks were initiated in 1985. The results of these surveys were made available to the public and based on these results, parks were posted during months of high park use. Pamphlets on Lyme disease were handed out by park staff and people were encouraged to stay in the areas that were well maintained as tick density was less in well-groomed areas.

In 1985, county veterinarians: reported cases of Lyme disease in dogs and the occasional cat;

provided speakers for the public forums; and distributed literature in their offices. The canine case reports also were used as a surveillance tool in an effort to predict the areas of the county most likely to become hot spots for human cases. The theory was that the dogs have greater potential for exposure and were likely to be the first infected. Also, since dogs are less wide ranging than humans, dogs probably pick up the disease close to home and are an indication of the spread of the infected tick. This information was used to alert residents in previously uninfected areas of the county.

A Lyme disease hotline was established in 1985; a taped message answered many of the commonly asked questions about the disease and provided additional telephone numbers where staff members were available to answer specific questions.

The first Lyme Disease Awareness Week (LDAW) was held in May 1987. A newspaper supplement, available to school children, was developed in cooperation with the Gannet newspaper chain and Ciba-Geigy Corporation. The second LDAW was held in spring 1988, and was more successful. Many of the materials developed were borrowed by surrounding county health departments. In spring 1989, the effort was expanded with the cooperation of the other regional county health departments to have events occurring simultaneously throughout the Lower Hudson Valley during LDAW III.

HEALTH CARE PROVIDERS

Messages developed for health care professionals emphasized the magnitude of the problem in Westchester: signs and symptoms of the disease; the need to include Lyme disease in the differential diagnosis when considering a wide array of symptom complexes; and the need for early diagnosis and aggressive treatment.

A day-long symposium for health care professionals was held in conjunction with New York Medical College in October 1984. At the opening of the symposium, the commissioner of health declared Lyme disease an epidemic in Westchester and made it a locally reportable disease. Mailings then were sent to physicians at the beginning of each Lyme disease season, reminding them of the need to report cases, and speakers were provided for local hospitals as part of a continuing educational program.

A second seminar for physicians and health care providers was held as part of LDAW II in May 1988; the seminar was attended by over 250 physicians from Westchester and the surrounding counties.

ELECTED OFFICIALS

The third and final component of the educational campaign was directed at state health department decision makers and the elected officials at the local, state, and national level. The message for these individuals emphasized the magnitude of the problem, the seriousness of the disease, the cost in human suffering, and the health care costs and work lost costs. High-ranking members of the state health department were invited to the first professional symposium in 1984. Literature was provided to the senators and assemblymen who represent the areas hardest hit in the county. Presentations were made before the health committee of the Westchester Board of Legislators. Speakers were provided at evening public forums held by state legislators, and the commissioner testified at hearings held by the State Assembly Health Committee.

RESULTS

Schoolchildren and teachers participated enthusiastically in the educational campaign. Children wrote letters and sent cartoons of ticks to the newspapers and to the Health Department. Parents performed nightly tick checks on their children in areas of high-disease prevalence. A number of large employers provided programmatic and monetary support for our efforts in subsequent years. The Lyme disease hotline attracted callers from all over the country, particularly after it was discussed in *Family Circle* magazine. Tabletop displays were in constant demand and circulated through banks, libraries, schools, and hospital lobbies. Lyme disease support groups were formed in heavily impacted areas of the county, and Lyme disease has become a frequent topic for CME lectures for physicians and nurses. The county executive and several staff members participated in Lyme Disease Awareness Week, and the county executive requested a budgetary "add on" from the Board of Legislators for 1987 to enhance the Health Department's programs. As a result of all our efforts, $125,000 was added in fiscal 1987 for education and testing. Additionally, state legislators earmarked $700,000 in the 1988 state budget for Lyme disease research, and these funds were continued in 1989. In 1989, federal funds became available.

CONCLUSION

Public health education and behavior modification campaigns take time and effort. If well planned and incrementally implemented over time, these programs can be successful and have a direct impact on the prevention of disease.

Much has been learned about Lyme disease over the past ten years. Public awareness campaigns have focused the attention of local, state, and federal decision makers on this growing problem. With grant support now available to researchers, the next ten years may provide us with the tools needed to prevent the disease and control the vector. ■

Psychological Impact of Media Coverage

of Lyme Disease

MARY E. SWIGAR, MD

The author assesses the psychological impact of media coverage of Lyme disease from global and symbolic perspectives. Additional information suggests useful changes for the media, medical educators, and the public.

Consider Figure 1. The information provides a liberal psychological impact.[1] Media coverage of Lyme disease almost is as much with us as our shadows. The real questions are: Is the psychological impact of media coverage managed well? Is the media aware of its responsibilities? Are we seeking and using information responsibly? Is the smiling person at the center of Figure 1 a false symbol or a symbol of the survival and adaptability of the human spirit? As is shown in Figure 1, we have much about which to worry.

In its psychological impact, media coverage about Lyme disease is affected by the context in which we live, with our concerns and dreads. What might the media consider Lyme disease to be on a symbolic level, in addition to the facts about it? And how might the symbolic level be better managed?

Lyme disease is spread by the bite of a very tiny tick. It is visible only with difficulty to the naked eye. Symbolically, it is a barely visible insect infestation of our person. This conjures up images of having lice or fleas or of being insect ridden—of being made unclean and swarmed by a poorly understood invader, then being injected with something noxious. In fact, as a consulting psychiatrist, one sees this as a common human dread. People hallucinating in delirium feel they have insects crawling on them. It used to be that dogs and occasionally humans had ticks—a nuisance and a bit of a joke. Looking for this tiny tick could resemble an obsessive compulsive disorder—the minute detailed examination of every inch of skin for this bug. It also could become a different bug phobia.

Another symbolic level is the primitive dread of our forests. Only now, instead of dreading a large rampaging animal, we dread a tiny insect. We obsessively spray and cover ourselves. But this also ties into our fears and concerns for environmental hazards—are our forests preserved and safe?

Lyme disease is spread by a tick-borne spirochete, *Borrelia burgdorferi.*[2] It is a spirochete similar to *Treponema pallidum,* the spirochete causing syphilis. In fact, there is serologic cross-reactivity in diagnostic tests.[3] Furthermore, there are chronic

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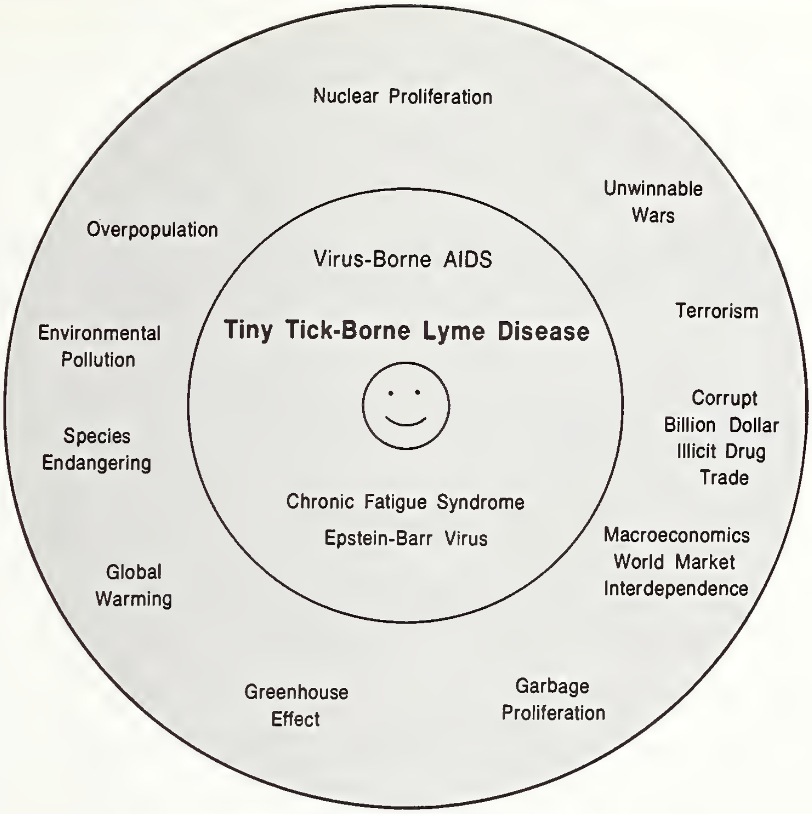

Figure 1. Lyme disease in the context of an unpredictable world.

symptoms and signs in common for all spirochetal diseases. Thus, the same complex, progressive systemic illness with a wide variety of manifestations is true of syphilis and Lyme disease.

It is a complex task for the individual, the media, and the average physician to become educated about an acquired, preventable illness, whose symptoms acutely are rash and flu, and then could resemble rheumatoid arthritis, multiple sclerosis, or psychosis. Symbolically, this means hidden, acquirable danger. Chronic disease, deformity, and disability potentially could result from a single instance of venturesomeness, recklessness, or lack of care.

We are reminded of a dangerous world by microscopic avengers. We have our primitive roots, but we also have an accelerating civilization and can inform ourselves. Physicians experience the impact of various information sources patients use (Figure 2). Further, forces of consumerism and modern medical care systems make patients demand more.

Is there published evidence that the popular media has responded to the need to participate in responsible medical education? The answer is simple: not regarding Lyme disease. However, a large evaluation study of print media by the Rand Corporation and UCLA published in *JAMA* suggested that balanced and accurate reporting exist on topics such as coronary artery bypass, estrogen use, caesarean birth, and breast cancer.[4]

Science inherently is difficult, requires time to be done properly, and does not lend itself to presentation in brief. However, when the media present new and dramatic results from the latest medical journal issues, they should also teach that the results require replication and validation. There is much to be done in general public education about medical science and the scientific method.[5] Public advertising can provide clear and useful scientific information for products.[6] Education of middle manage-

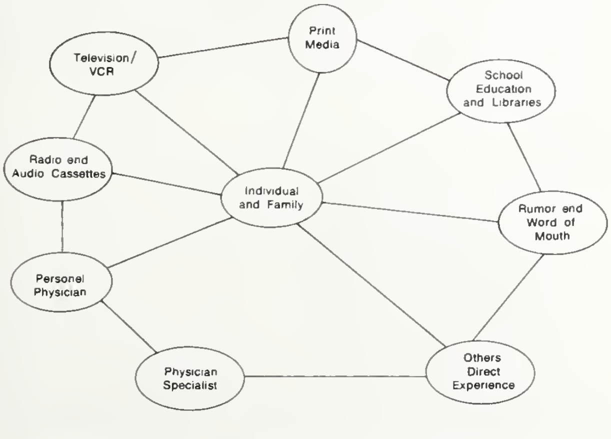

Figure 2. Learning about Lyme disease.

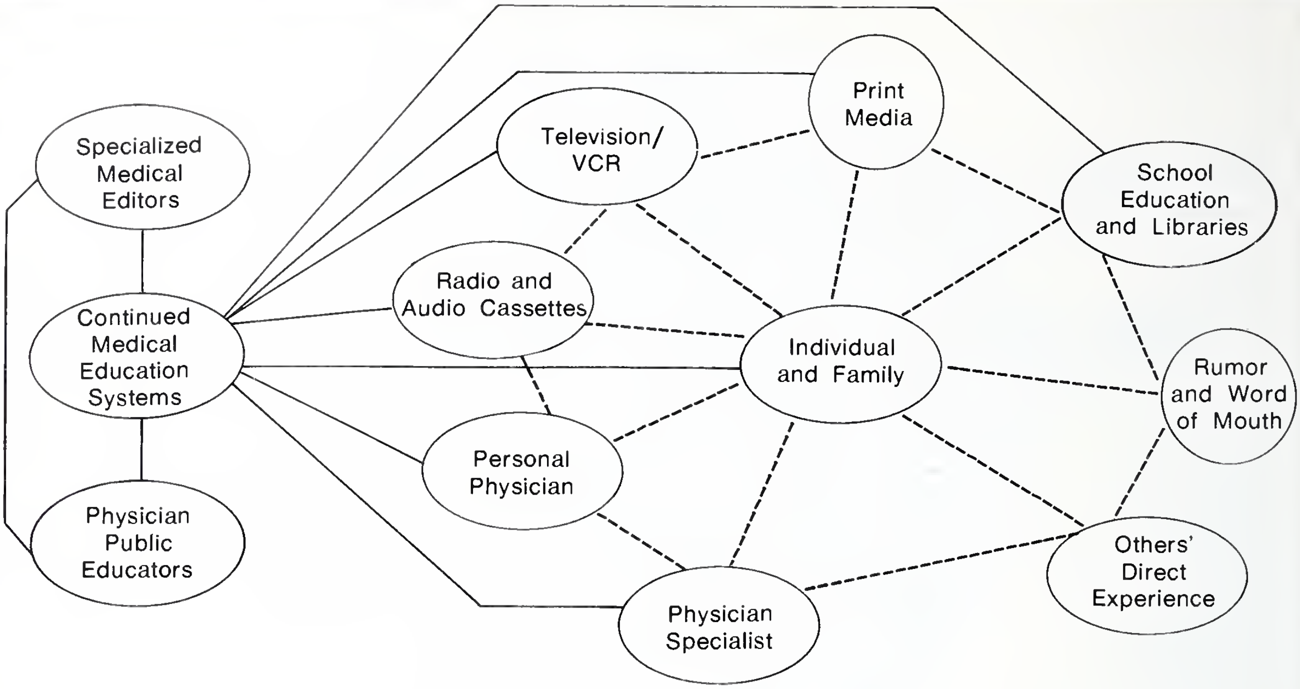
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Figure 3. Learning about Lyme disease supplemented.

ment personnel in the media, in medicine, and in product advertising is key to conveying a general understanding of science.[5]

The media added medical information specialists within their organizations (Figure 3). However, trust and compromise must be established between medical scientific educators and these media specialists. Resisting using catchy but inaccurate leads, misquoting and preinterview hidden bias could be avoided by the media. Physicians and scientists need to be succinct yet convey complexity, be available, provide background reading, and recheck copy. They also should be aware that a 20 minute interview might be condensed to 45 seconds.

An interesting evaluation study of the public's perceptions of information is available from London.[8] A representative group of television viewers were asked their responses to a spectrum of three shows on health. The spectrum was varied from soap opera, light talk show, and heavy but cynical drama series. Interestingly, viewer confidence about the health information provided in each show followed a U-shaped curve. Those viewers that did not watch and those viewers that thoroughly followed the programs had the most confidence in the medical information and treatments presented. Those viewers following the programs somewhat had the most skepticism. If these conclusions are correct, viewers planning to watch a medical information program should follow it as thoroughly as possible.

CONCLUSION

I have attempted to place the psychological impact of media coverage in both a global and symbolic context—in general and specifically about Lyme disease. I have presented information and suggestions for change from media, medical, and public systems' perspectives. ■

REFERENCES

1. Behr RL, Iyengar S: Television news, real-world cues, and changes in the public agenda. *Pub Opin Quar* 49:38-57, 1985.

2. Benach JL, et al.: Spirochetes isolated from the blood of two patients with Lyme disease. *N Engl J Med* 308:740-742, 1983.

3. Magnarelli LA, et al.: Cross-reactivity in serological tests for Lyme disease and other spirochetal infections. *J Infect Dis* 156:183-188, 1987.

4. Winkler JD, et al.: Popular press coverage of eight National Institutes of Health consensus development topics. *JAMA* 255:1323-1327, 1986.

5. Gregory RL: The public perception of science-1. *Perception* 15:231-233, 1986.

6. Gregory RL: The public perception of science-3. *Perception* 15:511-514, 1986.

7. Cranshaw R: Second thoughts: Medicine and the media. *J Clin Epidemiol* 42:815-816, 1989.

8. Wober M, Gunter B: Televison and beliefs about health care and medical treatment. *Curr Psychol Res Rev* 291-304, 1985.

Clinical Manifestations of Lyme Disease

LEONARD H. SIGAL, MD

The author discusses the clinical manifestations of Lyme disease, a multisystem inflammatory illness with protean symptomatology. The author also presents a brief historical review of the disease.

Lyme disease is a multisystem inflammatory disease caused by the spirochete, *Borrelia burgdorferi,* and spread by *Ixodes* ticks. In 1975, Steere described Lyme arthritis, an outbreak of juvenile rheumatoid arthritis, in three small towns on the east bank of the Connecticut River. Some of these patients recalled an expanding red rash, identified as erythema chronicum migrans (ECM).[1] The first report of ECM in the United States was in 1970, by Scrimenti, in Wisconsin, although the lesion had first been described in Europe in 1909.[2] The outbreak of juvenile rheumatoid arthritis in Connecticut also was linked to preceding ECM and tick bites, and over the next few years, Lyme arthritis, as it was first named, became known as Lyme disease. This occurred, in part, because of the association with cardiac disease, but also because approximately 10 percent of the patients had a neurologic syndrome essentially identical to a tick-borne neurologic syndrome in Europe, known as Bannwarth's syndrome. The multisystem, inflammatory nature of Lyme disease, a multifocal epidemic, was established.

Today in the United States, Lyme disease is identified as a multifocal epidemic disease in the Northeast (from Massachusetts through Pennsylvania, with cases described as far south as the Carolinas and Georgia); the northern Midwest (primarily Minnesota and Wisconsin, as well as Michigan), and in northern California and Oregon. Ninety percent of the cases reported in the United States are from these three regions, and the total number has in-

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creased steadily each year. This increase in cases is especially notable in New Jersey, second to New York in newly reported cases of Lyme disease.

After *B. burgdorferi* was identified as the etiologic agent of Lyme disease in the United States, studies in Europe established that the same organism was the cause of ECM in Germany, Austria, and Scandinavia. In addition, two other skin lesions reported in Europe from the late 19th century, acrodermatitis chronica atrophicans (ACA) and lymphadenosis benigna cutis (LABC), and tick-borne meningopolyneuritis, or Bannwarth's syndrome, were established as being caused by infection with the same organism.

Lyme disease now is known to have a worldwide distribution, with cases described in Africa, Asia, and Australia. The primary vector in each area has been identified as an *Ixodes* tick: *I. dammini* in the Northeast and Midwest, *I. scapularis* in the Southeast, *I. pacificus* in California, *I. ricinus* in Europe, *I. persulcatus* in Asia, and, possibly, *I. hyocyclus* in Australia.[3-5]

Lyme disease is an infectious disease capable of causing damage to a number of organ systems.[6,7] Stage one of the disease occurs within a month of inoculation with *B. burgdorferi,* the causative agent of Lyme disease.[8-10] The clinical syndrome at this stage includes ECM, the skin rash, and associated symptoms. Stage two of Lyme disease, which includes cardiac and/or neurologic disease, usually occurs two to three months after the initial infection, occasionally in the absence of any preceding evidence of illness suggestive of stage one. Stage three includes arthritis and/or chronic neurologic manifestations that recently have been described; these stage three manifestations may occur years after ECM, but may appear in the absence of any preceding history suggestive of earlier Lyme disease.

Stage one occurs between 1 day and 1 month after tick bite (median 7 days) and consists of ECM and associated symptoms: fever, fatigue, malaise, headache, stiff neck, arthralgia, and myalgia. About 50 to 70 percent of patients will experience ECM and, of these, 50 percent of patients will have more than one skin lesion. Regional (and occasionally systemic) lymphadenopathy may occur. Patients may develop pain on neck flexion, conjunctivitis, erythematous throat, temporomandibular joint pain, and hepatosplenomegaly and/or right upper quadrant tenderness.[11]

Nonspecific laboratory studies, like erythrocyte sedimentation rate, complete blood count, and liver function tests, are abnormal in between 20 and 50 percent of cases, but are not helpful in diagnosing Lyme disease.[11] Early in the disease, specific serologic tests may be negative and seropositivity may not occur until six to eight weeks into the illness.[12,13] *B. burgdorferi* has been cultured from biopsy specimens taken at the expanding red border of the ECM lesion.[8]

Two to three months following the onset of ECM, about 10 to 15 percent of untreated patients with stage one Lyme disease will experience neurologic disease. Meningoencephalitis, meningitis, cranial nerve palsies, and peripheral neuropathies may occur, often in combination, and often accompanied by extreme fatigue, malaise, headache, and photophobia.[14-16] Fever usually is absent. Mild encephalopathy, including difficulty with concentration and memory, and irritability and emotional liability may occur. These neurologic findings are essentially identical to those described in Europe, in the early part of this century and now known as Bannwarth's syndrome[17] or tick-borne meningopolyneuritis.[18]

A lymphocytic pleocytosis is found in the cerebrospinal fluid, with elevated protein, but normal glucose levels.[14,16] The spinal fluid is normal in stage one Lyme disease, even in the presence of headache; a few cases have had serial lumbar punctures, demonstrating that meningoencephalitis of stage two disease evolves. The meningitis of Lyme disease is indistinguishable from that of enterovirus, virtually epidemic in the state in the early fall. *Borrelia burgdorferi* has been grown from the cerebrospinal fluid of patients with Lyme meningitis.[8]

Neuropathic changes have been found on nerve conduction testing;[14] axonopathy was documented in one third of patients with peripheral neuropathy.[19] Peripheral nerve biopsies have shown heavy epineural vessel infiltration with mononuclear cells,[19-23] but the organism has not been found at the site of inflammation. Vasculitis was seen in one case;[20] luminal obliteration of perineural vessels without vasculitis was found in another case.[21] Immune complexes, immunoglobulin, and complement have not been seen in biopsy specimens.[19,20]

Vascular disease caused by *B. burgdorferi* may be the underlying mechanism for one report of cerebrovascular disease[24] and vasculitis has been seen on angiographic study of one patient with Lyme disease central nervous system (CNS) disease.[25]

Most patients with encephalitic symptoms have abnormalities on electroencephalography[14] and reversible neuropsychiatric testing abnormalities have been documented;[19] in some patients, small plaques have been found on magnetic resonance imaging (MRI), occasionally resolving after antibiotic therapy.[19] An insufficient number of normal individuals have had MRI to know if these plaques represent *B. burgdorferi*-induced cerebral damage or if normal individuals may have such plaques. In collaboration with Dr. Jonathan Willard-Mack, a neuropsychologist at UMDNJ-Robert Wood Johnson Medical

School, and Dr. Robert Chabot, a clinical electroneurophysiologist at New York University School of Medicine, the staff of the Lyme Disease Center at UMDNJ-Robert Wood Johnson Medical School is studying this population; we have found there to be widespread, often severe, abnormalities on both neuropsychologic testing and quantitative electroencephalography, some of which may resolve after therapy.

Cardiac disease occurs in 8 to 10 percent of previously untreated patients, two to three months after ECM, occasionally in coincident with stage two neurologic disease. Atrioventricular conduction defects, mild congestive heart failure, and ST and T wave changes compatible with myopericarditis have been reported.[26] Reversible[27-29] and rarely fatal[30] myocarditis has been described. The multifocal damage documented in electrophysiologic studies of individual cases is likely the explanation for the multiple levels of heart block occasionally described, in rapid succession, in individuals with Lyme disease carditis.[26,29] Focal myonecrosis and a sparse interstitial infiltrate of polymorphonuclear cells and lymphocytes was described in one series of myocardial biopsies,[21] while *B. burgdorferi,* myonecrosis, and perivascular mononuclear cell infiltration was found in another.[29] The finding of an organism within the myocardium suggests that direct invasion occurs in Lyme myocarditis.[30]

Arthritis is the classic feature of stage three Lyme disease,[31] and the reason the first epidemic of Lyme disease was described 15 years ago. Steere summarized experience with 55 patients with Lyme disease who did not receive antibiotic therapy. These patients had been infected before the efficacy of antibiotics had been appreciated, so they represent the only collection of patients where the natural evolution of Lyme arthritis has been studied.[32] A prospective study of these patients revealed that 44 patients (80 percent) experienced articular problems over the course of a six-year period. This included: 10 patients (18 percent) who experienced arthralgias with or following ECM, one day to eight weeks (mean, two weeks) after the onset of the lesion; 28 patients (51 percent) with polyarthritis, often migratory, present four days to two years after the onset of ECM (mean, 6 months); 14 patients with preceding migratory arthralgias; and 6 patients (11 percent) with chronic Lyme arthritis, usually affecting a single joint (most often the knee), with onset 4 months to four years after ECM (mean, 12 months). Five of these 6 patients had experienced either arthralgia or intermittent arthritis prior to developing chronic synovitis. The migratory polyarthritis group is reminiscent of the original cohort of patients described by Steere.[1]

The synovium in Lyme arthritis resembles rheumatoid synovium,[21,31,33] although there are distinct differences between rheumatoid and Lyme synovitis.[21] In Lyme disease, there is hypertrophy and hyperplastic changes, with focal necrosis, vascular proliferation, and chronic inflammatory cell infiltration. Mononuclear cell aggregates and lymphoid follicles may be present, suggesting that there is an ongoing local immunologic reaction within the joint.[34] As in syphilis, endarteritis obliterans may be seen, with capillary arborization, dilatation, and congestion.[33] *B. burgdorferi* has been seen rarely in or near synovial vessels[33] or in synovial fluid,[35] and has been grown from synovial fluid.[36]

Tertiary neuroborreliosis is a term that purposely draws upon the clinical analogy with tertiary neurosyphilis. This late form of Lyme disease includes chronic encephalomyelopathy and neuropathy,[37-39] and, like tertiary neurosyphilis, stage three neurologic Lyme disease may develop insidiously months to years after the onset of infection, even in the absence of clinically apparent preceding infection. Subclinical infection thus may occur for long periods prior to the emergence of overt neurologic damage; this raises serious concerns over the finding of asymptomatic seropositivity in a significant percent of people in areas endemic for Lyme disease. Clinical experience with this population is limited, and the true clinical spectrum of this stage of Lyme disease currently is being defined. Claims that amyotrophic lateral sclerosis,[40] multiple sclerosis,[41] and Alzheimer's disease[42] are due to infection with *B. burgdorferi* have been laid to rest. Many individual cases of neurologic damage have been stated as due to *B. burgdorferi* infection merely because the patient has a positive serologic test, a circumstance that does not guarantee causality.

One of the major controversies in the study of Lyme disease is the question of what clinical conditions can be ascribed to *B. burgdorferi* infection. On the basis of sero-epidemiologic and biopsy evidence, it has been suggested that a number of cutaneous lesions, including morphea, lichen sclerosus et atrophicus, eosinophilic fascitis, and other cutaneous fibrotic disorders, are due to *B. burgdorferi,* although these claims are by no means definitive.[43] Subclinical or asymptomatic infection may be quite prevalent in endemic areas, so that seropositivity may represent no more than a coincidence.

Another area of major concern relates to *B. burgdorferi* infection occurring during pregnancy. Shortly after the Lyme disease epidemic in the Northeast was appreciated, reports of adverse outcomes of pregnancy began to appear. In a review of 19 pregnancies between 1976 and 1984 complicated by Lyme disease, 14 normal births and 5 adverse outcomes were noted.[46-49]

Also, there is no evidence that Lyme disease can be passed by sexual or other intimate contact. There is evidence, however, that *B. burgdorferi* can survive in blood[50] and various blood products[51] for as long as six to eight weeks. Whether Lyme disease can be spread by transfusion is unclear.[52]

Lyme disease diagnosis can be aided by the use of serologic and cellular testing. However, Lyme disease remains a clinical diagnosis. In the absence of a set of well-substantiated criteria for the diagnosis of Lyme disease, i.e. Jones' criteria for rheumatic fever, there is no substitute for a careful history and physical done by a well-prepared health care provider, and confirmed by serologic evidence of preceding infection.

Antibiotic therapy in stage one disease usually results in resolution of disease and prevents progression to later stages. Oral therapy is recommended for early disease. Even for severe stage one disease, there is no evidence that intravenous drugs are necessary. The only comparative study of antibiotic therapy in early disease suggested that either penicillin or tetracycline was more effective than erythromycin (1,000 mg in four divided doses for 10 days) in preventing progression to later disease; 20 days of tetracycline was no better than 10 days of treatment.[53] There are many proposed antibiotic regimens for early disease, and there is no evidence that one drug is superior to another. Tetracycline, amoxicillin, ampicillin, and penicillin have been used with good success, at doses of between 1,000 and 2,000 mg per day, in four divided doses; doxycycline at 100 mg two or three times a day also is effective. There is no evidence that the addition of probenecid to therapy with the penicillins is necessary to increase efficacy of penicillin therapy. Other agents, including cefuroxime axetil, cefixime, and minocycline have been used; initial studies of azithromycin, a new macrolide antibiotic with greater anti-*B. burgdorferi* activity than erythromycin, are encouraging.

The optimum duration of therapy has not been determined, although current practice generally is to treat for three to four weeks.

There may be a remarkable worsening of signs and symptoms of disease,[53] often accompanied by fever, chills, malaise, headache, and myalgia, in approximately 15 percent of patients, within a few hours to days of the onset of therapy. This may be accompanied by a rise in the peripheral blood white cell count, and occasionally by increases in liver function tests. All of these abnormalities are relatively mild and usually resolve within a day or so. This phenomenon was first described in syphilis, and is known as the Jarisch-Herxheimer reaction. Such reactions also may be experienced early in the therapy of other borrelial infections, and of brucellosis, where the reaction may be life threatening. It appears that antibiotic therapy causes the disruption of many of the organisms and causes the liberation of many borrelial components. When these circulating proteins, polysaccharides, and lipids are identified by the immune system, there is a sudden, systemic response, with exacerbation of symptoms—the Jarisch-Herxheimer reaction.

If untreated, ECM spontaneously will resolve in a median of 28 days, although it may persist for as long as 14 months. Progression to later disease is most frequent in patients with more serious early manifestations,[32,54] but progression may follow mild or inapparent stage one Lyme disease.[55]

Oral or parenteral antibiotics are effective in treatment of stage two Lyme disease; the suggested route, dose, and duration of therapy varies with the type of manifestations.[14,30,42,53,56]

The arthritis of Lyme disease generally is treated with intravenous antibiotics, including penicillin (20 million units per day in six divided doses), cefotaxime (3 g twice a day), and ceftriaxone (1 g twice a day). Chloramphenicol, at doses appropriate to body mass, also is effective in the treatment of Lyme disease. In 55 percent of the cases reported by

Steere,[57] Lyme arthritis was treated successfully with intravenous penicillin. *B. burgdorferi* is sensitive to ceftriaxone and this agent has been used successfully.[58] One study suggests that subsequent treatment with ceftriaxone is effective in patients who have failed to respond to penicillin.[58] There is preliminary evidence to suggest that prolonged oral therapy (one month) may be effective in treatment of late disease but these studies must be confirmed.[59]

The most appropriate regimen for the treatment of stage three neurologic disease probably is intravenous antibiotics, as used for the other late manifestations of Lyme disease. There is not enough clinical experience to be definitive about this, however, or to know if late neurologic damage is totally reversible. There are anecdotes that claim slow, but impressive, resolution.

Based on the premise that *B. burgdorferi* is a slow-growing organism, some groups have suggested that therapy for late Lyme disease should include intravenous courses for six weeks or longer and prolonged oral maintenance therapy, up to 18 to 24 months. At this time, there is no proof that these regimens are any more effective than the more traditional approaches; there is every reason to believe that the longer regimens are associated with more side effects and more expense to the patient.

One argument in favor of more prolonged therapy is the persistence of symptoms and the occasional apparent "progression" to later manifestations, often in the presence of persisting elevated levels of anti-*B. burgdorferi* antibody. The general experience has been that it may take six months or longer for arthritis to fully resolve after antibiotic therapy;[57] persisting nonspecific symptoms may occur after therapy of other manifestations of Lyme disease. This may be due to the persistence of *B. burgdorferi*-derived antigens at the site of disease, serving as a focus for prolonged inflammation.[34] Our experience suggests that some patients develop symptoms after Lyme disease (including fibromyalgia) that are not due to ongoing infection and are not amenable to further antibiotic therapy.[60] Many patients referred to the Lyme Disease Center at Robert Wood Johnson Medical School have been subjected to many, unnecessary courses of oral and intravenous therapy for complaints clearly not due to persisting or new *B. burgdorferi* infection, but which have been mistakenly attributed to Lyme disease.[60] It is crucial to recall that not every complaint in a patient who has had Lyme disease (or, for that matter, in an individual with serum antibodies to *B. burgdorferi*) is necessarily due to *B. burgdorferi* infection.

The one indisputable fact is that the earlier a patient is treated, the less likely that person is to progress to later manifestations of Lyme disease. The overwhelming majority of patients with treated stage one Lyme disease will experience a cure. Fatalities due to *B. burgdorferi* infection are very rare. The only Lyme disease fatalities reported in the English language literature were due to carditis [although in one, coexisting babesiosis complicated the clinical picture[30]] and possibly due to adult respiratory distress syndrome related to Lyme disease.[61] There also is a brief French report of a fatal case of Lyme meningoradiculitis, complicated by encephalitis and phrenic paralysis.[62] Nonfatal permanent heart block due to Lyme disease was reported from the Netherlands,[63] but all other cases of conduction defect have been reversible. Lyme meningitis resolves with antibiotic therapy.[56]

Lyme arthritis has proved somewhat less responsive to antibiotic therapy. In the initial report, 55 percent of patients treated with intravenous penicillin resolved; later studies suggest a better response rate to therapy with third-generation cephalosporins, including cefotaxime and ceftriaxone. Nonetheless, some patients have required other forms of treatment, including hydroxychloroquine (as a remittive agent) and synovectomy.[6] An understanding of the immunopathogenesis of this disease is helpful in appreciating the persistence of inflammation and symptoms in some patients; a full review of this topic is beyond the scope of this paper, but can be found elsewhere.[34]

A controversial issue in the therapy of Lyme disease is the status of asymptomatic people who happen to test positive for antibodies to *B. burgdorferi*. It is not known how many, if any, of these people ever will experience tissue damage due to this infection. The policy at the Lyme Disease Center is that if a true seropositive result is obtained on an individual without any preceding history of Lyme disease, oral therapy for one month, as for stage one disease, is given.

Should a tick be found on your patient it should be removed with thin tweezers or forceps, using antiseptic precautions. Old wives' tales suggest that kerosene, petroleum jelly, or a lit match or cigarette are effective in tick removal; these methods should be eschewed, as they may cause the tick to act as a syringe and regurgitate into the wound, causing transfer of *B. burgdorferi*.

Even if an engorged tick is found, it is estimated that in an endemic area only 10 percent of tick bites actually transmit the disease.[64] This suggests prophylactic antibiotic therapy of all tick bites is not necessary; in one study, the risk of adverse reactions from the antibiotic therapy was as great as the risk of seroconversion if no prophylaxis was given. If this experience is extrapolated to repeated prophylaxis of large numbers of residents in endemic areas, the cost and potential morbidity of therapy would be tremendous; in some endemic areas, individuals would be on constant antibiotic prophylaxis from April to October for their repeated tick exposures. In addition, prophylactic therapy may give a false sense of security and lead individuals to abandon preventive techniques. Our suggestion is that if no skin rash develops and no signs or symptoms suggestive of Lyme disease develop, the bitten individual should return for blood testing at six to eight weeks after the bite; if seropositive, the patient then can be treated with an oral regimen. Some suggest that a blood test done at the time of the bite is indicated. True seropositivity would suggest prior exposure to *B. burgdorferi*, and, if treatment of asymptomatic seropositivity is considered advisable, therapy could be started at that time.

CONCLUSIONS

Lyme disease has been described by the press and broadcast media as being the scourge of the 1980s and 1990s; reporters speak of Lyme disease as being second to AIDS as a public health problem in the United States. Well-meaning physicians have stated that prolonged and repeated therapy is necessary to suppress Lyme disease, and that rarely, if ever, is it cured. Reports of medical problems thought due to *B. burgdorferi* infection appear in the medical literature, supported by only a positive serologic test. The tests practitioners use to document exposure to *B. burgdorferi* have been unfairly derided as being nearly useless, because of cross-reactivity, inaccuracy, and lack of standardization. The end result has been that patients in endemic areas often feel their physicians do a poor job of diagnosing and treating Lyme disease, that the tests and therapeutic agents are profoundly flawed, and that Lyme disease should represent a real cause for alarm.[65]

Given the perception by many patients of Lyme disease as a mysterious, difficult-to-diagnose disease, with an ever-expanding and poorly defined, clinical spectrum, it is not surprising that many patients have seized upon Lyme disease as the ultimate explanation for all of their ills. It is no wonder that many patients view Lyme disease with alarm, bordering on hysteria.

Lyme disease has become a major health concern in a growing number of communities. Much has been learned about the disease, although much study is needed. The problem is manageable, if we can convince all of our patients that Lyme disease is a cause for concern, not panic; vigilance, not hysteria. ■

REFERENCES

1. Steere AC, Malawista SE, Snydman DR, et al.: Lyme arthritis. An epidemic of oligoarticular arthritis in children and adults in three Connecticut communities. *Arthritis Rheum* 20:7-17, 1977.

2. Scrimenti RJ: Erythema chronicum migrans. *Arch Dermatol* 102:104-105, 1970.

3. Steere AC, Malawista SE, Craft JE, et al.: International symposium on Lyme disease. *Yale J Biol Med* 57:445-705, 1984.

4. Stanek GL, Flamm H, Barbour AG, Burgdorfer W: Proceedings of the second international symposium on Lyme disease and related disorders. *Zbl Bakt Hyg A* 263:1-495, 1986.

5. Benach JL, Bosler EM: Third international symposium on Lyme disease and related disorders. *Ann NY Acad Sci* 539:1-513, 1988.

6. Steere AC: Lyme disease. *N Engl J Med* 321:586-596, 1989.

7. Sigal LH: Lyme disease: A worldwide borreliosis. *Clin Exp Rheumatol* 6:411-421, 1988.

8. Steere AC, Grodzicki RL, Kornblatt AN, et al.: The spirochetal etiology of Lyme disease. *N Engl J Med* 308:733-740, 1983.

9. Benach JL, Bosler EM, Hanrahan JP, et al.: Spirochetes isolated from the blood of two patients with Lyme disease. *N Engl J Med* 308:740-742, 1983.

10. Johnson RC, Schmid GP, Hyde FW, et al.: *Borrelia burgdorferi* sp. nov.: Etiologic agent of Lyme disease. *Intern J Sys Bacteriol* 34:496-497, 1984.

11. Steere AC, Bartenhagen NH, Craft JE, et al.: The early clinical manifestations of Lyme disease. *Ann Intern Med* 99:76-82, 1983.

12. Craft JE, Grodzicki RL, Steere AC: Antibody response in Lyme disease: Evaluation of diagnostic tests. *J Infect Dis* 149:789-795, 1984.

13. Russell H, Sampson JS, Schmid GP, et al.: Enzyme-linked immunosorbent assay and indirect immunofluorescence assay for Lyme disease. *J Infect Dis* 149:465-476, 1984.

14. Pachner AR, Steere AC: The triad of neurologic manifestations of Lyme disease: Meningitis, cranial neuritis, and radiculoneuritis. *Neurology* 35:47-53, 1985.

15. Pfister HW, Einhaupl KM, Wilske B, Preac-Mursic V: Bannwarth's syndrome and enlarged neurological spectrum of arthropod-borne borreliosis. *Zbl Bakt Hyg A* 263:343-347, 1986.

16. Reik L Jr, Steere AC, Bartenhagen NH, et al.: Neurologic abnormalities of Lyme disease. *Medicine* 58:281-294, 1979.

17. Bannwarth A: Chronische lymphocytare meningitis, entzundliche polyneuritis und rheumatismus. Ein beitrag zum problem allergie und nervensystem. *Arch Psychiatr Nervonkr* 113:284-376, 1941.

18. Horstrup P, Ackermann R: Durch zecker ubertragene meningopolyneuritis (Garin-Bujadoux-Bannwarth). *Fortsch Neurol Psychiatr* 41:583-606, 1973.

19. Halperin JJ, Pass HL, Anand AK: Nervous system abnormalities in Lyme disease. *Ann NY Acad Sci* 539:24-34, 1988.

20. Camponova F, Meier C: Neuropathy of vasculitic origin in a case of Garin-Bujadoux-Bannwarth's syndrome with positive *Borrelia* antibody response. *J Neurol* 233:698-726, 1986.

21. Duray PH: The surgical pathology of human Lyme disease. An enlarging picture. *Am J Surg Pathol* 11:47-60, 1977.

22. Kristoferitsch W: Neuropathies in cases of acrodermatitis chronica atrophicans. *Ann NY Acad Sci*

539:35-45,, 1988.

23. Vallat JM, Hugon J, Lubeau M, et al.: Tick-bite meningoradiculoneuritis: Clinical, electrophysiologic, and histologic findings in ten cases. *Neurology* 37:749-753, 1987.

24. Stiernstedt G, Skoldenberg B, Garde A, et al.: Clinical manifestations of *Borrelia* infections of the nervous system. *Zbl Bakt Hyg A* 263:289-296, 1986.

25. Midgard R, Hofstad H: Unusual manifestations of nervous system *Borrelia burgdorferi* infection. *Arch Neurol* 44:781-783, 1987.

26. Steere AC, Batsford WP, Weinberg M, et al.: Lyme carditis: Cardiac abnormalities of Lyme disease. *Ann Intern Med* 93:8-16, 1980.

27. Hansen K, Madsen JK: Myocarditis associated with tickborne *Borrelia burgdorferi* infection. *Lancet* i:1324, 1986.

28. Jacobs JC, Rosen JM, Szer IS: Lyme myocarditis diagnosed by gallium scan. *J Pediatr* 105:950-952, 1984.

29. Reznick JW, Braunstein DB, Walsh RL, et al.: Lyme carditis electrophysiologic and histopathologic study. *Am J Med* 81:923-927, 1986.

30. Marcus LC, Steere AC, Duray PH, et al.: Fatal pancarditis in a patient with coexistent Lyme disease and babesiosis. *Ann Intern Med* 103:374-376, 1985.

31. Steere AC, Gibofsky A, Patarroyo ME, et al.: Chronic Lyme arthritis. Clinical and immunogenetic differentiation from rheumatoid arthritis. *Ann Intern Med* 90:896-901, 1979.

32. Steere AC, Schoen RT, Taylor E: The clinical evolution of Lyme arthritis. *Ann Intern Med* 107:725-731, 1987.

33. Johnston YE, Duray PH, Steere AC, et al.: Lyme arthritis spirochetes found in synovial microangiopathic lesions. *Am J Pathol* 118:26-34, 1985.

34. Sigal LH: Lyme disease: Immunologic manifestations and possible immunopathogenetic mechanisms. *Sem Arthritis Rheum* 18:151-167, 1988.

35. Snydman DR, Schenkein DP, Berardi VP, et al.: *Borrelia burgdorferi* in joint fluid in chronic Lyme arthritis. *Ann Intern Med* 104:798-800, 1986.

36. Schmidli J, Hunziker T, Moesli P, Schaad UB: Cultivation of *Borrelia burgdorferi* from joint fluid three months after treatment of facial palsy due to Lyme borreliosis. *J Infect Dis* 158:905-906, 1988.

37. Ackermann R, Rehse-Kupper B, Gollmer E, Schmidt R: Chronic neurologic manifestations of erythema migrans borreliosis. *Ann NY Acad Sci* 539:16-23, 1988.

38. Pachner AR: Spirochetal diseases of the central nervous system. *Neurol Clinics* 4:207-222, 1986.

39. Pachner AR, Steere AC: CNS manifestations of third stage Lyme disease. *Zbl Bakt Hyg A* 263:301-306, 1986.

40. Mandell H, Steere AC, Reinhardt BN, et al.: Lack of antibodies to *Borrelia burgdorferi* in patients with amyotrophic lateral sclerosis. *N Engl J Med* 320:255-256, 1989.

41. Coyle PK: *Borrelia burgdorferi* antibodies in multiple sclerosis patients. *Neurology* 39:760-761, 1989.

42. Pappolla MA, Omar R, Saran B: Concurrent neuroborreliosis and Alzheimer's disease: Analysis of the evidence. *Hum Pathol* 20:753-757, 1989.

43. Sigal LH: Response of mononuclear cells to *Borrelia burgdorferi*. *Ann Intern Med* 103:808, 1985.

44. Markowitz LE, Steere AC, Benach JL: Lyme disease during pregnancy. *JAMA* 255:3394-3396, 1986.

45. MacDonald AB: Human fetal borreliosis, toxemia of pregnancy, and fetal death. *Zbl Bakt Hyg A* 263:189-200, 1986.

46. MacDonald AB, Benach JL, Burgdorfer W: Stillbirth following maternal Lyme disease. *NY State J Med* 87:615-616, 1987.

47. Schlesinger PA, Duray PH, Burke BA, et al.: Maternal-fetal transmission of the Lyme disease spirochete, *Borrelia burgdorferi*. *Ann Intern Med* 103:67-68, 1965.

48. Weber K, Bratzke HJ, Neubert U, Wilske B, Duray PH: *Borrelia burgdorferi* in a newborn despite oral penicillin for Lyme borreliosis during pregnancy. *Pediatr Infect Dis* 7:286-289, 1988.

49. Dlesk A, Broste SK, Harkins PG, et al.: Lyme seropositivity (LS+) and pregnancy (PG) outcome in the absence of symptoms (Sx) of Lyme disease (LD). *Arthritis Rheum* 32:S46, 1989.

50. Baron SJ, Fister RD, Cable RG: Survival of *Borrelia burgdorferi* in blood products. *Transfusion* 29:581-583, 1989.

51. Baranton G, Saint-Girons I: *Borrelia burgdorferi* survival in human blood samples. *Ann NY Acad Sci* 539:444-445, 1988.

52. Aoki SK, Holland PV: Lyme disease—another transfusion risk? *Transfusion* 29:646-650, 1988.

53. Steere AC, Hutchinson GJ, Rahn DW, et al.: Treatment of the early manifestations of Lyme disease. *Ann Intern Med* 99:22-26, 1983.

54. Sigal LH, Moffat CM, Steere AC, Dwyer JM: Cellular immune findings in Lyme disease. *Yale J Biol Med* 57:595-598, 1984.

55. Reik L Jr, Burgdorfer W, Donaldson JO: Neurologic abnormalities in Lyme disease without erythema chronicum migrans. *Am J Med* 81:73-78, 1986.

56. Steere AC, Pachner AR, Malawista SE: Neurologic abnormalities of Lyme disease: Successful treatment with high-dose intravenous penicillin. *Ann Intern Med* 99:767-772, 1983.

57. Steere AC, Green J, Schoen RT: Successful parenteral penicillin therapy of established Lyme arthritis. *N Engl J Med* 312:869-874, 1974.

58. Dattwyler RJ, Halperin JJ, Pass H: Ceftriaxone as effective therapy in early Lyme disease. *J Infect Dis* 155:1322-1325, 1987.

59. Liu NY, Dinerman H, Levin RE, et al.: Randomized trial of doxycycline versus amoxicillin-probenecid for the treatment of Lyme arthritis: Treatment of nonresponders with IV penicillin or ceftriaxone. *Arthritis Rheum* 32:S46, 1989.

60. Sigal LH: Experience with the first 100 patients referred to a Lyme disease center. *Am J Med* 88:577-581, 1990.

61. Kirsch M, Ruben FL, Steere AC, et al.: Fatal adult respiratory distress syndrome in a patient with Lyme disease. *JAMA* 259:2737-2739, 1988.

62. Melet M, Gerard A, Voiriot P, et al.: Meningoradiculonevrite mortelle au cours d'une maladie de Lyme. *La Presse Medicale* 15:2075, 1986.

63. deKooning J, Hoogkaamp-Korstanje JAA, van der Linde MR, Crijns HJGM: Demonstration of spirochetes in cardiac biopsies of patients with Lyme disease. *J Infect Dis* 160:150-153, 1989.

64. Costello CM, Steere AC, Pinkerton RE, Feder HM Jr: Prospective study of tick bites in an endemic area for Lyme disease. *J Infect Dis* 159:136-139, 1989.

65. Sigal LH, Taragin MI: Public awareness and anxiety concerning Lyme disease in an endemic area. IV International Conference on Lyme Borreliosis, Stockholm, Sweden, 1990.

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Lyme Disease During Pregnancy

SANDRA J. EDLY, MD

Lyme disease during pregnancy has been associated with a variety of adverse pregnancy outcomes.

Infectious diseases during pregnancy can have an adverse effect on pregnancy outcome. Toxoplasmosis, rubella, cytomegalovirus, and herpesvirus are capable of being transplacentally transmitted to the fetus and have known teratogenic potential. *Treponema pallidum,* the etiologic agent of syphilis, also can cross the placenta and can lead to overwhelming infection of the fetus. Lyme disease, caused by *Borrelia burgdorferi,* and syphilis are both spirochetal infections. Because of the morphologic and antigenic similarities of *B. burgdorferi* and *T. pallidum,* much concern has been raised about the potential adverse effect Lyme disease may have during pregnancy. In addition, another *Borrelia, B. recurrentis,* the cause of relapsing fever, also has been implicated in congenital infection and adverse pregnancy outcome.[1]

A maternal infection may be transmitted to the fetus by transplacental transmission or by acquisition of the organism by the fetus during passage through the birth canal. This latter route appears to play no role in the transmission of perinatal Lyme disease. Therefore, attention has been directed to investigation of transplacental transmission of *B. burgdorferi,* and its possible adverse effect during pregnancy.

TRANSPLACENTAL TRANSMISSION

Transplacental transmission of *Borrelia burgdorferi* has been documented. The first case report of maternal-fetal transmission of Lyme disease, reported by Schlesinger in 1985,[2] noted a woman who contracted Lyme disease during the first trimester of pregnancy that was not diagnosed and, therefore, was not treated. The diagnosis of first trimester Lyme disease eventually was made based on maternal history: the patient had developed an expanding annular skin lesion, two secondary skin lesions, headache, stiff neck, arthralgia, malaise, and inguinal lymphadenopathy after participating in outdoor activities in an area of Wisconsin known to be endemic for Lyme disease. At 35 weeks' gestation, the patient was delivered of a 3,000 g male infant who died 39 hours after birth of cardiac failure. The infant had multiple cardiovascular anomalies including coarctation of the aorta, aortic valvular stenosis, patent ductus arteriosus, and endocardial fibroelastosis. A few spirochetes morphologically compatible with *B. burgdorferi* were seen in sections of the infant spleen, renal tubules, and bone marrow, but not in the heart. Maternal serology for *B. burgdorferi* was positive, and was negative for syphilis.

The second case of transplacental transmission of *Borrelia burgdorferi*, reported by MacDonald in 1987,[3] was of a woman with first trimester Lyme disease not diagnosed and not treated. The diagnosis was made retrospectively based on maternal history of an annular erythematous skin lesion in the first trimester, followed by pain and swelling of the knee; these resolved spontaneously. The patient took no medications during her pregnancy except for digoxin for mitral valve prolapse. At term, the patient was delivered of a 2,500 g stillborn. An autopsy of the infant showed a four mm ventricular septal defect.

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No other congenital anomalies were noted. *B. burgdorferi* was cultured from the fetal liver and the spirochete also was seen in sections of the fetal brain, adrenal gland, heart, liver, and placenta. Maternal serology was positive for anti-*B. burgdorferi* antibodies, and negative for syphilis.

MacDonald reported three other patients who had transplacental transmission of Lyme disease with evidence of *B. burgdorferi* infection in fetal tissue.[4] Each of the three women had a second trimester pregnancy loss, and *B. burgdorferi* was cultured from the fetal liver in all three cases. None of the patients had evidence of any antepartum infection.

In 1988, Weber reported a case of *Borrelia burgdorferi* infection in a newborn despite treatment of the mother with oral penicillin for Lyme disease during pregnancy.[5] The patient developed erythema chronicum migrans (ECM) two weeks after she had multiple tick bites in the first trimester. She received a course of antibiotic therapy and the remainder of her antepartum course was uneventful. The patient was delivered at term by vacuum extraction of a 3,400 g infant who appeared normal at birth. However, the infant developed respiratory failure and died 23 hours after birth. The cause of death was reported as probably due to respiratory failure as a result of perinatal brain damage. An autopsy showed a large scalp hematoma, a small infratentorial hemorrhage, as well as a few small hemorrhages in the tentorium and falx cerebri. There were no congenital malformations and no significant inflammation was seen in the organs that were available for examination. Spirochetes morphologically compatible with *B. burgdorferi* were seen in silver-stained sections of the brain and liver. Although maternal serologic testing was negative for anti-*B. burgdorferi* antibodies by indirect immunofluorescence, the maternal sera was saved and tested several years later by enzyme-linked immunosorbent assay (ELISA) which confirmed the presence of significant IgM antibodies against *B. burgdorferi.* The authors of this report contend that *B. burgdorferi* was persistent in fetal tissue despite antibiotic treatment of the mother. However, the patient was treated with propicillin (an oral penicillin) three times daily for only seven days; few if any authorities on the treatment of Lyme disease would consider this adequate antibiotic therapy.

STUDIES OF LYME DISEASE

The first study of Lyme disease during pregnancy was reported by Markowitz in 1986.[6] This study included 19 pregnant women with Lyme disease during pregnancy who were identified prior to knowledge of pregnancy outcome; cases occurred between 1976 and 1984. Of 19 patients, 5 had adverse pregnancy outcomes (26 percent). Adverse outcomes included intrauterine fetal death at 20 weeks' gestation; preterm delivery at 36 weeks' gestation and neonatal hyperbilirubinemia; syndactyly; cortical blindness with developmental delay; and rash of the newborn. None of these adverse outcomes could be directly attributed to Lyme disease infection. Thirteen of the 19 patients received antibiotic treatment for their Lyme disease. Of the 6 patients who did not receive treatment, 4 patients had a normal pregnancy outcome, and 2 patients had an adverse outcome. Eight patients had onset of Lyme disease in the first trimester, 7 patients in the second trimester, and 2 patients in the third trimester; for 2 patients the trimester of onset was considered unknown. There was no significant difference in outcome by antimicrobial therapy or trimester of onset.

One patient of 19 with a second trimester pregnancy loss is more than the expected rate, however, cultures of the fetus and placenta were negative for *Borrelia burgdorferi.* One preterm delivery out of 18 (5.5 percent) is not unexpected. One child was diagnosed as having cortical blindness with developmental delay at eight months of age, however, the child tested negative for anti-*B. burgdorferi* antibodies at one year of age.

While the number of adverse pregnancy outcomes in this study is alarming, the authors concluded that none of these outcomes could be directly attributed to Lyme disease infection during pregnancy. However, serologic analysis of cord blood was not performed for any of the infants subsequently identified as having an adverse outcome. In addition, serologic testing may not be the definitive diagnostic tool to determine if the fetus has been exposed in utero to *B. burgdorferi,* for serologic testing for Lyme disease is far from perfect.

Williams reported a six-month pilot study of cord blood testing of infants for Lyme disease antibodies in both an area endemic for Lyme disease as well as a control group from a nonendemic area.[7] The investigators tested cord blood samples at the time of delivery from a total of 421 infants and recorded the presence or absence of major and minor malformations for each infant. Infant cord blood specimens were collected from 255 infants born in an area endemic for Lyme disease, of whom 10.2 percent had some detectable antibody to *B. burgdorferi.* Of 166 infants tested from a nonendemic area, 2.4 percent had some detectable antibodies to *B. burgdorferi.* The rate of major and minor malformations was not significantly different between the two groups. In addition, there was no increased rate of malformations in those infants who did have detectable anti-*B. burgdorferi* antibodies compared to those who were seronegative. The infants with detectable *B. burgdorferi* antibodies tended to be of lower birth weight, to be smaller for gestational age, and to have neonatal jaundice more frequently than the infants born in the nonendemic area; however these differences were not statistically significant.

Since only live born infants were included in this study, these results do not exclude the possibility of an increased rate of congenital malformations in areas endemic for Lyme disease. Congenital malformations may have occurred in those pregnancies that resulted in spontaneous abortion or miscarriage and these would have been preselected from inclusion in this study. However, preliminary data reported by Dlesk, from the Marshfield Clinic in Wisconsin, showed no increased rate of spontaneous abortion in women with detectable Lyme disease antibodies.[8] Investigators tested asymptomatic women from a Lyme disease endemic area at first prenatal and postpartum visits for the presence of anti-*B. burgdorferi* antibodies. Outcome of pregnancy was recorded for each patient. At the time of the preliminary report, 116 study patients had completed pregnancies. Of these 116 patients, 12 patients had miscarriages (10.3 percent). Only 1 patient who miscarried tested positive for Lyme disease antibodies (8.3 percent). Of 104 women who did not have a miscarriage, 13 women were Lyme disease seropositive (12.5 percent). The authors preliminarily have concluded that Lyme disease seropositivity in the absence of symptoms of Lyme disease does not have an important effect on the outcome of pregnancy, as patients who were seropositive for Lyme disease antibodies did not have a higher rate of miscarriage. This study currently is ongoing and the investigators plan to include approximately 1,000 patients in the final report.

Carlomagno reported preliminary results of a study comparing the rate of Lyme disease seropositivity in women who had a spontaneous abortion to those who delivered at term.[9] Of 49 consecutive patients who either had a first or second trimester spontaneous abortion, 6 patients tested seropositive for Lyme disease antibodies (12.2 percent), compared to 3 of 49 women who delivered at term (6.1 percent). Although more women were seropositive from the spontaneous abortion group compared to the group who delivered at term, these differences were not statistically significant.

In 1989, Nadal reported results of a serological survey of women and their infants at the time of delivery for the presence of Lyme disease antibodies.[10] Over a one-year period, the investigators tested 1,416 women and their 1,434 infants at the time of delivery for the presence of anti-*B. burgdorferi* antibodies. Only 12 of the 1,416 women tested positive, giving a seroprevalance rate of 0.85 percent. Of the 12 women who had detectable Lyme disease antibodies, only 1 woman (who had a tick bite during pregnancy followed by ECM) had a history consistent with Lyme disease onset during pregnancy. Six of the 12 women had a history consistent with pregestational onset of Lyme disease, and the remaining 5 women had an unremarkable history.

Of the 12 women tested positive for Lyme disease antibodies, 7 women were delivered of infants who had a remarkable neonatal period. Two infants had hyperbilirubinemia; one infant had muscle hypotonia attributable to medication given to the mother; one infant was post-term, small for gestational age, and had evidence of chronic placental insufficiency; one infant had transient macrocephaly; and one infant had transient supraventricular extrasystoles. The infant born to the woman who had a first trimester tick bite and ECM had a ventricular septal defect. However, the authors concluded that since none of the infants were seropositive for anti-*B. burgdorferi* antibodies, it was unlikely that the adverse outcomes were due to Lyme disease.

DISCUSSION

Information on the effect of Lyme disease during pregnancy is incomplete, but conclusions can be made based upon accumulated information.

Unlike the white-footed mouse, an important reservoir of *Borrelia burgdorferi,* transplacental transmission of Lyme disease does appear to occur in human pregnancy. Unequivocal confirmation of *B. burgdorferi* infection of the fetus by isolation of the organism from fetal tissue obviously is limited to those cases where fetal or neonatal death has occurred. Despite this limitation, several cases of transplacental transmission of *B. burgdorferi* have been documented.

Lyme disease during pregnancy has been associated with adverse pregnancy outcome including spontaneous abortion, miscarriage, stillbirth, preterm delivery, hyperbilirubinemia, syndactyly, cortical blindness with developmental delay, rash of the newborn, and congenital cardiac anomalies. In none of these cases was the adverse outcome of pregnancy directly attributable to Lyme disease. It is possible that those adverse outcomes reported to be associated with Lyme disease during pregnancy occurred at a rate no different from the general population, i.e. pregnant women without Lyme disease. Without well-controlled studies, it is impossible to determine if these adverse outcomes are occurring at an increased rate due to Lyme disease infection, or at the same rate as in the general population.

Furthermore, although a normal pregnancy outcome with Lyme disease during pregnancy has been reported, it is likely that cases of Lyme disease during pregnancy that have resulted in normal pregnancy outcomes have not been reported as diligently as those which have resulted in adverse outcomes. If this is true, then the potential adverse effect of Lyme disease during pregnancy would appear to be less significant than suggested by case reports to date.

Preliminary data from currently ongoing studies have shown no increased rate of spontaneous abortion, and no increased rate of congenital malformations with Lyme disease during pregnancy. However, there is an obvious need for controlled studies of large numbers of patients to determine conclusively the effect, if any, of Lyme disease infection during pregnancy. Unfortunately, there are many difficulties faced by the investigator, not the least of which is that serologic testing of the mother and fetus may not be an accurate reflection of the presence or absence of *B. burgdorferi* infection.

TREATMENT OF LYME DISEASE

A standard for treatment of Lyme disease during pregnancy has yet to be established. In 1988, the *Medical Letter* included recommendations for treatment of the pregnant patient that differed from treatment of the nonpregnant patient only by excluding the use of tetracycline or doxycycline during pregnancy.[12] This guideline for the treatment of Lyme disease recommended that patients be treated according to stage or severity of disease. That is, oral antibiotics were recommended for stage one and mild stage two disease (early Lyme disease, ECM, and mild neurologic disease), and intravenous antibiotic therapy was recommended for stage two disease unless mild, and for stage three disease (Lyme arthritis).

Some physicians continue to treat pregnant patients with known or suspected Lyme disease more aggressively than nonpregnant patients, treating all pregnant women with intravenous therapy, irrespective of the stage of the disease. This approach is apparently felt by some to be justified as an effort to minimize any effect that Lyme disease may have on the fetus. It would appear that the current data available on the effect of Lyme disease during pregnancy does not warrant such intensive and costly therapy in all pregnant patients.

When oral antibiotics are used, the most common regimen is amoxicillin (500 mg three times daily) or penicillin (500 mg four times daily) given for a period of 21 or more days. When intravenous therapy is prescribed, either penicillin G (20 million units daily in divided doses given every four hours for two to three weeks) or ceftriaxone (2 g once daily for two to three weeks) is recommended. For penicillin allergic patients, erythromycin can be used, but the estolate form should be avoided as it has been associated with reversible, subclinical hepatotoxicity in pregnant patients who took it for two to three weeks. In addition, the efficacy of erythromycin in the treatment of Lyme disease has not been clearly established, but it appears to be less effective than other recommended antibiotics.

Prophylactic treatment of deer tick bites during pregnancy continues to be controversial. Since the chance of acquiring *B. burgdorferi* infection from a tick bite has been estimated at about one in ten, the universal treatment of all tick bites during pregnancy will result in unnecessary treatment for nine of ten patients. One alternative is to prophylactically treat women for tick bites during the first and early second trimesters, since the fetus is most susceptible to teratogens during this time, which corresponds to the period of fetal organogenesis.

Finally, because Lyme disease is a preventable infection, counselling patients about the signs and symptoms of Lyme disease and measures that can be taken to prevent infection should become a part of routine prenatal care. ■

REFERENCES

1. Fuchs PC, Oyama AA: Neonatal relapsing fever due to transplacental transmission of *Borrelia. JAMA* 208:690-692, 1969.
2. Schlesinger PA, Duray PH, Burke BA, et al.: Maternal-fetal transmission of the Lyme disease spirochete, *Borrelia burgdorferi. Ann Intern Med* 103:67-68, 1985.
3. MacDonald AB, Benach JL, Burgdorfer W: Stillbirth following maternal Lyme disease. *NY State J Med* 87:615-616, 1987.
4. MacDonald AB: Human fetal borreliosis, toxemia of pregnancy, and fetal death. *Zentralblatt Bakt Hygiene* 263:189-200, 1986.
5. Weber K, Bratzke HJ, Neubert V, et al.: *Borrelia burgdorferi* in a newborn despite oral penicillin for Lyme borreliosis during pregnancy. *Pediatr Infect Dis J* 7:286-289, 1988.
6. Markowitz LE, Steere AC, Benach JL, et al.: Lyme disease during pregnancy. *JAMA* 255:3394-3396, 1986.
7. Williams CL, Benach JL, Curran AS, et al.: Lyme disease during pregnancy: A cord blood serosurvey. *Annals NY Acad Sciences* 539:504-506, 1988.
8. Dlesk A, Broste SK, Harkins PG, et al.: Lyme seropositivity and pregnancy outcome in the absence of symptoms of Lyme disease. Abstract #34, ICAAC, 1989.
9. Carlomagno G, Luksa V, Candussi G, et al.: Lyme *Borrelia* positive serology associated with spontaneous abortion in an endemic Italian area. *Acta Europaea Fertil* 19:279-281, 1988.
10. Nadal D, Hunziker UA, Bucher HU, et al.: Infants born to mothers with antibodies against *Borrelia burgdorferi* at delivery. *Eur J Pediatr* 148:426-427, 1989.
11. Mikkelsen AL, Palle C: Case report—Lyme disease during pregnancy. *Acta Obstet Gynecol Scand* 66:477-478, 1987.
12. *Medical Letter on Drugs and Therapeutics.* 30:65-66, 1988.

Neurological Manifestations

of Lyme Disease

ANDREW R. PACHNER, MD

Neurologic involvement in Lyme disease often is seen in endemic areas. Common manifestations, diagnostic tests, treatment, and prognosis are discussed and the importance of lumbar puncture is stressed.

The spector of neurological involvement in Lyme disease looms large in areas endemic for the disease. The clinician faced with the patient with possible neurological Lyme disease must rely on what is known about Lyme meningitis and what is inferred to be true based on our understanding of the behavior of the spirochete in other organ systems. In addition, we have centuries of experience with manifestations of syphilis, and there is growing evidence that *Treponema pallidum* and *Borrelia burgdorferi* share a number of characteristics, the most relevant of which is neurotropism.

The most common manifestation of Lyme disease in the nervous system is Lyme meningitis, also called Lyme meningoencephalitis, Bannwarth's syndrome, or Garin-Bujadoux syndrome. The symptoms are caused by meningeal irritation from inflammation due to the presence of *B. burgdorferi*. The spirochete has been cultured from the cerebrospinal fluid (CSF) in some patients with Lyme meningitis, and the symptoms are highly reversible with intravenous antibiotics. The "classical" triad of meningitis, radiculoneuritis, and cranial neuritis occurs only in a small percentage of Lyme meningitis patients, and many patients have a mild chronic meningitis with nonspecific symptoms of headache and stiff neck that may be quite difficult to diagnose. Some patients develop a seventh palsy with no CSF abnormalities.

The importance of lumbar puncture (LP) in the diagnosis of neurological involvement in Lyme disease cannot be overemphasized. This infection rarely causes significant structural damage; imaging of the brain with computed tomography or magnetic resonance imaging (MRI) scans is not helpful. There is no characteristic abnormality on an electroencephalogram (EEG), and in patients with relatively severe involvement, the EEG is normal. As in many chronic infections of the nervous system, LP is the most useful test. Although many patients, especially those with relatively mild symptoms are loathe to undergo LP, an explanation of the risks and benefits of LP usually results in the patient accepting the procedure. Most patients with neurological involvement with Lyme disease will have a CSF pleocytosis and/or an elevated protein, and commonly anti-*B. burgdorferi* antibody will be positive in the serum and CSF. A normal spinal fluid is strong evidence against the diagnosis of neurological Lyme disease.

There has been much publicity about Lyme disease, and frequently the antibody assay is criticized

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as being inaccurate and unreliable. There is some truth to this, mainly because of a combination of unrealistic expectations of the assay and a range of quality in the performance of the assay by laboratories. Since there frequently is a mild or delayed antibody response to the organism, antibody may not be detectable for one to two months after infection. Thus, serology is definitely not a clinically useful assay for erythema chronicum migrans. However, by the time neurological involvement is present, usually more than three weeks after infection, anti-*B. burgdorferi* antibody titers are present and easily detectable in the serum. The other major problem with the assay is variability in the assay's quality. The government has not become involved in regulation of the Lyme antibody assay, and there have been a large number of laboratories providing the assay to an anxious public. These laboratories range in accuracy from excellent to atrocious, and it is difficult for the practitioner to differentiate.

DIAGNOSIS

The diagnosis of Lyme meningoencephalitis generally is straightforward. In a patient suspected of having this manifestation, LP is performed with measurement of serum and CSF anti-*B. burgdorferi* antibody. Patients with significant "encephalopathic" complaints undergo neuropsychological testing and those with neuropathic symptoms get electromyography/nerve conduction velocity testing.

The small percentage of patients who have focal neurological deficits consistent with central involvement undergo MRI scanning with gadolinium contrast. The combination of clinical manifestations, serology, and LP results will determine whether intravenous antibiotic therapy is indicated.

TREATMENT

Patients with neurological involvement in Lyme disease are treated with intravenous antibiotics. The antibiotics used, the duration of treatment, and the doses remain controversial. We have found that two weeks of intravenous treatment with 20 million units of penicillin G is curative in Lyme meningoencephalitis. Ceftriaxone also has been used with success, and other third-generation cephalosporins probably will prove to be useful. As is the case in Lyme arthritis, treatment of late parenchymal Lyme disease is even more controversial. Fortunately, this type of neurological involvement is unusual. Encephalopathy generally responds to intravenous antibiotics especially when a CSF pleocytosis is present. Neuropathy also is antibiotic responsive. In those few patients with focal demyelinating syndromes associated with *B. burgdorferi* infection, treatment with antibiotics has not been predictably effective. The question always must be raised in these patients whether the neurological disease is due to active infection or an immune-mediated phenomenon.

Patients who continue to be symptomatic with fatigue, arthralgias, or myalgias after antibiotic treatment are treated with nonsteroidal anti-inflammatory medications. These patients improve over time and repeat intravenous antibiotics generally are not necessary.

PROGNOSIS

The prognosis after adequate antibiotic treatment of neurological involvement with Lyme disease is excellent. Treatment "failures" are of two types: the group of patients with definite Lyme meningoencephalitis who continue to have some symptoms after treatment and these patients lose objective signs of disease such as CSF pleocytosis and/or neuropathy and they improve over months if treated symptomatically with anti-inflammatory medications; and the group of patients who do not respond to antibiotics because the diagnosis of Lyme disease is inaccurate or because they have Lyme disease in addition to some other neurological disease. Thus, some patients can have Lyme disease as an incitement for multiple sclerosis and antibiotics may not affect the course of their demyelination. Some patients with severe neuropathic damage or fixed lesions in the central nervous system (CNS) may not improve back to baseline with treatment, but this treatment outcome could hardly be considered a failure.

Future work will focus on improving our means of diagnosis particularly in the CNS and optimizing treatment regimens for patients. We need to know more about the fate of the organism in the CNS; this information most likely will come from animal models. ■

REFERENCES

1. Reik L, Steere AC, Bartenhagen N, et al.: Neurologic abnormalities of Lyme disease. *Medicine* 58:281-294, 1979.

2. Pachner AR, Steere AC: The triad of neurological manifestations of Lyme disease. *Neurology* 35:47-53, 1985.

3. Stiernstedt GT, Skoldenberg BR, Vandvik B, et al.: Chronic meningitis and Lyme disease in Sweden. *Yale J Biol Med* 57:491-497, 1984.

4. Steere AC, Pachner AR, Malawista SE: Successful treatment of neurologic abnormalities of Lyme disease with high-dose intravenous penicillin. *Ann Intern Med* 99:767-772, 1983.

5. Pachner AR, Steere AC, Signal LH, et al.: Antigen-specific proliferation of CSF lymphocytes in Lyme disease. *Neurology* 35:1642-1643, 1985.

6. Pachner AR, Duray P, Steere AC: Central nervous system manifestations of Lyme disease. *Arch Neurol* 46:790-795, 1989.

Immunology of Lyme Disease

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The author discusses the immunology of Lyme disease in three categories: immunologic changes (how the immune system is modified); immunopathogenetic mechanisms (how immune changes cause tissue damage); and immunologic markers (how antigen-specific changes can be used to confirm diagnosis).

The immunologic features of any infectious disease that attract the interest of an immunologist fall into three broad categories: immunologic changes; immunopathogenetic mechanisms; and immunologic markers. A discussion of the immunology of Lyme disease can begin with these categories. An understanding of the second and third categories is crucial to making diagnostic and therapeutic decisions about Lyme disease.

Immunologic Changes. *Borrelia burgdorferi,* the causative agent of Lyme disease, is spread by *Ixodes* ticks and possibly by other hematophagous insects.[1,2] Tick saliva may play an important role in transmission of the disease,[3-5] and some have proposed a second infectious agent may be transmitted with *B. burgdorferi.*[6] Other *Borrelia* change surface proteins readily,[7,8] which may play a role in avoidance of the immune response. It is known that *B. burgdorferi* can change in culture, with loss of plasmids,[9] changes or loss of certain surface proteins,[10,11] and changes in morphology.[12] Specific tissue tropisms of *B. burgdorferi* have not been established in humans, although the organism has been found in the cerebrospinal fluid[13] and brain,[14,15] with extended survival within the reticuloendothelial system and brain.[16] These are in agreement with the general affinity *Borrelia* has for neural tissue.[17] In animal models, the organism causing relapsing fever

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can be found in spleen, eye, brain, and Kupffer cells,[17] whereas in the animal model of Lyme disease, the organism is found within the spleen, kidney, eye, heart, and urinary bladder.[18,19]

The organism is capable of eliciting a broad range of immunologic changes in the human host. Some of this may be determined by the immunogenetic type of the patient. HLA-DR2 was described as a risk factor for late manifestations of Lyme disease,[20] and for facial and other cranial neuropathies.[21] Recently, HLA-DR4 has been associated with chronic arthritis[22] and with both arthritis and radiculitis/myeloradiculitis.[21]

Patients infected with *B. burgdorferi* experience polyclonal B cell activation,[23] which is to say that the organism nonspecifically stimulates many different B cells in vivo, including B cells that make antibodies not specific for the organism. The large amount of IgM produced in some patients correlates with progression to later manifestations of Lyme disease.[24,25]

Cryoglobulins[26] and immune complexes[27] are found in serum and synovial fluid of patients with Lyme arthritis. There is concentration of complexes, as measured by C1q binding, in the synovial fluid,[27,28] where the complexes may be proinflammatory; the level of immune complexes in the synovial fluid strongly correlates with the number of polymorphonuclear cells in the fluid.[27] Aggregates of IgM and IgG are found within phagocytes isolated from the fluid.[28] Unlike rheumatoid arthritis, IgM rheumatoid factor is not found in the serum of Lyme arthritis, using the standard latex fixation technique,[20,27,29] although, using the more sensitive ELISA, IgM rheumatoid factor can be identified.[30] Anti-nuclear antibodies, likewise, are absent in Lyme disease.[31]

Cellular immune function also is modified in Lyme disease. Early in the disease, lymphopenia is found,[24,32] the degree of which inversely correlates with the total serum IgM. Anti-lymphocyte antibodies have not been found.

Immunoregulation, as measured by the spontaneously active suppressor cell assay, is deficient during acute disease and in those destined for later disease.[32] The addition of *B. burgdorferi* antigens to normal peripheral blood mononuclear cells can induce immunoregulatory changes in vitro. Using the short-lived suppressor cell assay, differences between the synovial fluid and peripheral blood mononuclear cell populations were documented; more suppression of antigen-specific responses than of mitogen-induced proliferation was found in the synovial population, with the opposite the case in blood.[33] The ratio of phenotypic helper to suppressor cells is normal in Lyme disease,[25,34] but an increased ratio of inducers of help to inducers of suppression has been found.[35] Lyme disease synovial fluid contains activated T lymphocytes of both the helper and suppressor phenotype, with many more inducers of help than of suppression present.[35]

Natural killer cell activity (NKCA) is decreased in patients with active disease and returns to normal with convalescence.[34] As with immunoregulation, the in vitro addition of *B. burgdorferi* antigens can alter NKCA, as well.[36]

B. burgdorferi induces the production of interleukin-1 (IL-1) by human mononuclear cells[37,38] and IL-1 is found in the synovial fluid of patients with Lyme arthritis;[39] the production of tumor necrosis factor, another important monokine, may be stimulated as well. These cytokines have broad immunologic activities, and can modify the function of local tissue cells, like synoviocytes and fibroblasts.

Certain components of *B. burgdorferi* have chemoattractant activity for polymorphonuclear cells;[40] same cells can be attracted to the site of inflammation by complement degradation products,[41,42] liberated when the organism fixes complement.[43]

Thus, *B. burgdorferi* is capable of eliciting a number of immunologic changes, systemic and local, specific and nonspecific, that may be the cause of tissue damage in Lyme disease.

Immunopathogenetic Mechanisms. *B. burgdorferi* has been grown from tissue taken from the skin lesion, erythema chronicum migrans,[13] from the cerebrospinal fluid of patients with Lyme disease meningitis/meningoencephalitis,[13] and from the joint fluid of a patient with Lyme arthritis.[44] Thus, there apparently is a live organism present at these sites of inflammation. Using histopathologic techniques, what appears to be *B. burgdorferi* has been found in the heart of patients with Lyme disease carditis[45] and in the brain of a patient with tertiary neuroborreliosis.[46] The organism never has been seen in peripheral nerve biopsies from patients with Lyme-associated neuropathy.[47] It is quite clear that *B. burgdorferi* can cause widespread, occasionally severe, tissue damage, perhaps even when the organism is not present locally, although the underlying mechanisms remain the subject of speculation.[47] These mechanisms can be divided into three categories: local presence of live organism at the site of inflammation; local presence of dead/effete organism at the site of inflammation; and organism-derived products no longer present at the site of inflammation.

Local presence of live organisms. If the organism is alive and growing, in skin, joint, or brain, a local inflammatory process can occur. *B. burgdorferi* can fix complement, fragments of which will act as chemotactic factors, attracting inflammatory cells. Later, antibody to the organism will enhance both complement fixation and phagocytosis, leading to further inflammation. The local inflammation that results then can cause tissue damage. In addition, function of macrophages and T lymphocytes can be modified locally by the organism. This can lead to poor regulation of inflammation locally or possibly to local tissue changes, e.g. sclerosis, due to modification of fibroblast function by locally produced cytokines, or production of collagenase by synoviocytes exposed to IL-1.[48]

Local presence of dead/effete organism. Many of the same local changes might occur, even if the organism is dead or dying. Complement fixation, antibody binding, and local phagocyte function would be the same whether the organism is alive or dead. Cytokine production elicited by *B. burgdorferi* is likewise not dependent on the viability of the organism. The antigens of *B. burgdorferi* are seemingly poorly degraded. Such antigens, shed by disrupted or dead organisms, could induce active inflammation, despite the absence of live microorganism.[49,50] In situ immune complex formation could provide a persisting pro-inflammatory focus.[27] Finally, this situation may provide the circumstances necessary for the establishment of inflammation analogous to that seen in the antigen-induced arthritis model. In the animal model, an antigen is given intravenously to sensitize the animal. Later inoculation of the same antigen into the joint of this animal will lead to inflammation of the joint.[51] Later, intravenous challenge with the same antigen results in a flare of the arthritis in the original joint affected.[52] The liberation of *B. burgdorferi*-derived antigens from foci of persistence of the antigen, e.g. the reticuloendothelial system [the site of residence of other *Borrelia*[16] and *Treponema pallidum*[53]], could induce just such a flare of Lyme arthritis in a patient.[47]

Organism-derived products no longer present at the site of inflammation. As in the peripheral neuropathy of Lyme disease, there may be no evidence of *B. burgdorferi* present, at the time of inflammation or previously. A possible explanation for the genesis of tissue damage might be autoimmunity. In at least two diseases, rheumatic fever and Chagas' disease, a component of the microorganism involved resembles a component of human tissue.[54] In these circumstances, the immune response to the microorganism then can recognize and damage the human cross-reacting structure, a process known as molecular mimicry. We have found that Lyme neurologic patients have antibodies in their serum that can bind human nerve, specifically the axonal portion of nerve.[54] The anti-axonal reactivity of these sera can be absorbed out by incubation of the sera with *B. burgdorferi,* but not other organisms, like *Staphylococcus aureus, Streptococcus pneumoniae, Pseudomonas aeruginosa,* or *Proteus mirabilis.* The sera also bind to neuroblastoma cell lines derived from human tumors. A single monoclonal antibody, one of a number that binds to the organism's flagellin, also binds to axons and to the neuroblastoma cells; this monoclonal antibody immunoprecipitates a single protein from neuroblastoma cells, a protein of 67,000 daltons apparent molecular weight. Thus, immunologic cross-reactivity of the *B. burgdorferi* flagellin and this previously undescribed protein may underlie the peripheral neuropathy of Lyme disease. More work is needed before this mechanism can be established as active in Lyme disease.

Knowledge of the immunopathogenesis of Lyme disease is important in interpreting responses to antibiotics. Given the fact that dead or effete organisms can elicit a persisting inflammatory reaction, it is no wonder that symptoms and signs of Lyme disease may persist after therapy, for up to six months or longer. If molecular mimicry is active in the pathogenesis of tissue damage, responses may be even slower, and may require immunomodulatory therapy; this proposed mechanism of disease is not established, so that any discussion of possible use of such therapy is pure speculation.

Immunologic Markers. As described, two specific immunologic responses to *B. burgdorferi* have been documented: humoral (antibody) responses and cellular responses, and both can be used to help support the diagnosis of Lyme disease.

Serologic techniques and their value in Lyme disease are covered elsewhere in this issue. Of note is the fact that there is concentration of antigen-specific reactivity at the closed space site of inflammation, the meninges and the synovial cavity. Thus, testing synovial fluid or cerebrospinal fluid and comparing with peripheral blood can be used to document that the inflammation is due to *B. burgdorferi* infection. Concentration of antibodies has been documented in the cerebrospinal fluid of patients with Lyme meningitis[55] and these antibodies may recognize *B. burgdorferi* antigens not bound by serum antibodies.[56] Concentration of antibodies in the synovial fluid also has been documented in Lyme arthritis. There is concentration of antigen-specific reactive T lymphocytes in the cerebrospinal fluid of patients with Lyme meningitis[57] and in the synovial fluid of arthritic patients.[34] It is known that in endemic areas, up to 5 to 10 percent of the population may have antibodies that suggest prior exposure to *B. burgdorferi*, but have no clinical evidence of Lyme disease. Thus, concentration of reactivity can be used to differentiate between an individual who has Lyme arthritis or meningitis and someone who has arthritis or meningitis due to another cause and happens to have antibodies to *B. burgdorferi* in his blood.

SUMMARY

B. burgdorferi is an organism capable of modifying the immune response of its human hosts in a number of specific and nonspecific ways. An understanding of immune changes can help with diagnostic and therapeutic decisions in Lyme disease. ■

REFERENCES

1. Johnson RC, Schmid GP, Hyde FW, et al.: *Borrelia burgdorferi* sp. nov.: Etiologic agent of Lyme disease. *Int J Sys Bacteriol* 34:496-497, 1984.
2. Sigal LH: Lyme disease: A worldwide borreliosis. *Clin Exp Rheumatol* 6:411-421, 1988.
3. Hellerstrom S: Erythema chronicum migrans Afzelius with meningitis. *South Med J* 43:330-334, 1950.
4. Asbrink E: Erythema chronicum migrans Afzelius and acrodermatitis chronica atrophicans. Early and late manifestations of *Ixodes* ricinus-borne *Borrelia* spirochetes. *Acta Derm Venereol* 118:1-61, 1985.
5. Ribeiro JMC, Makoul GT, Levine J, et al.: Antihemostatic, anti-inflammatory and immunosuppressive properties of the saliva of a tick, *Ixodes dammini*. *J Exp Med* 161:332-344, 1985.
6. Neubert W: Zur Atiologie von erythema-migrans-krankheit und Lyme erkraukung. *Hautarzt* 35:563-570, 1984.
7. Barbour AG, Tessier SL, Stoenner HG: Variable major proteins of *Borrelia hermsii*. *J Exp Med* 156:1312-1324, 1982.
8. Barbour AG, Hayes SF: Biology of *Borrelia* species. *Microbiol Rev* 50:381-400, 1986.
9. Herzer P, Wilske B, Preac-Mursic V, et al.: Lyme arthritis: Clinical features, serological and radiographic findings of cases in Germany. *Klin Wochenschr* 64:206-215, 1986.
10. Schwan TG, Burgdorfer W: Antigenic changes of *Borrelia burgdorferi* as a result of in vitro cultivation. *J Infect Dis* 156:852-853, 1987.
11. Wilske B, Preac-Mursic V, Schierz G, Busch V: Immunochemical and immunological analysis of European *Borrelia burgdorferi* strains. *Zbl Bakt Hyg A* 263:92-102, 1986.
12. Hayes SF, Burgdorfer W, Barbour AG: *Borrelia burgdorferi:* EM characterization of cloned and uncloned strains. *Ann NY Acad Sci* 539:383-385, 1988.
13. Steere AC, Grodzicki RL, Kornblatt AN, et al.: The spirochetal etiology of Lyme disease. *N Engl J Med* 308:733-740, 1983.
14. MacDonald AB: *Borrelia* in the brains of patients dying with dementia. *JAMA* 256:2195-2196, 1986.
15. MacDonald AB, Miranda JM: Concurrent neocortical borreliosis and Alzheimer's disease. *Hum Pathol* 18:759-761, 1987.
16. Felsenfeld O: *Borrelia,* human relapsing fever, and parasite-vector-host relationships. *Bacteriol Rev* 29:46-74, 1965.
17. Southern PM Jr, Sanford JP: Relapsing fever. A clinical and microbiological review. *Medicine* 48:129-149, 1969.
18. Duray PH, Johnson RC: The histopathology of experimentally infected hamsters with the Lyme disease spirochete, *Borrelia burgdorferi*. *Proc Soc Exp Biol Med*

181:263-269, 1986.

19. Johnson RC, Kodner C, Russell M, Duray PH: Experimental infection of hamster with *Borrelia burgdorferi*. *Ann NY Acad Sci* 539:258-263, 1988.

20. Steere AC, Gibofsky A, Patarroyo ME, et al.: Chronic Lyme arthritis. Clinical and immunogenetic differentiation from rheumatoid arthritis. *Ann Intern Med* 90:896-901, 1979.

21. Majsky A, Bojar M, Jirous J: Lyme disease and HLA-DR antigens. *Tissue Antigens* 30:188-189, 1987.

22. Steere AC: Pathogenesis of Lyme arthritis. *Ann NY Acad Sci* 539:87-92, 1988.

23. Sigal LH, Steere AC, Dwyer JM: In vivo and in vitro B cell hyperactivity in Lyme disease. *J Rheumol* 15:648-654, 1988.

24. Shrestha M, Grodzicki RL, Steere AC: Diagnosing early Lyme disease. *Am J Med* 78:235-240, 1985.

25. Sigal LH, Moffat CM, Steere AC, Dwyer JM: Cellular immune findings in Lyme disease. *Yale J Biol Med* 57:595-598, 1984.

26. Steere AC, Hardin JA, Ruddy S, et al.: Lyme arthritis. Correlation of serum and cryoglobulin IgM with activity and serum IgG with remission. *Arthritis Rheum* 22:471-483, 1979.

27. Hardin JA, Steere AC, Malawista SE: Immune complexes and the evolution of Lyme arthritis. Dissemination and localization of abnormal C1q binding activity. *N Engl J Med* 301:1358-1363, 1979.

28. Hardin JA, Steere AC, Malawista SE: The pathogenesis of arthritis in Lyme disease: Humoral immune responses and the role of intra-articular immune complexes. *Yale J Biol Med* 57:589-593, 1984.

29. Steere AC, Malawista SE, Snydman DR, et al.: Lyme arthritis. An epidemic of oligoarticular arthritis in children and adults in three Connecticut communities. *Arthritis Rheum* 20:7-17, 1977.

30. Kujala GA, Steere AC, Davis JS: IgM rheumatoid factor in Lyme disease: Correlation with disease activity, total serum IgM, and IgM antibody to *Borrelia burgdorferi*. *J Rheumatol* 14:772-776, 1987.

31. Ryberg B, Hindfelt B, Nilsson B, et al.: Anti-neural antibodies in Guillain-Barré syndrome and lymphocytic meningoradiculitis (Bannwarth's syndrome). *Arch Neurol* 41:1277-1281, 1984.

32. Moffat CM, Sigal LH, Steere AC, et al.: Cellular immune findings in Lyme disease. Correlation with serum IgM and disease activity. *Am J Med* 77:625-632, 1984.

33. Sigal LH, Steere AC, Freeman DH, Dwyer JM: Proliferative responses of mononuclear cells in Lyme disease. Reactivity to *Borrelia burgdorferi* antigens is greater in joint fluid than in blood. *Arthritis Rheum* 29:761-769, 1986.

34. Dattwyler RJ, Thomas JA, Benach JL, et al.: Cellular immune responses in Lyme disease. *Zentralblat Bakteriol Mikrobiol Hyg* 263:151-159, 1986.

35. Thomas JA, Lipschitz R, Golightly MG, Dattwyler RJ: Immunoregulatory abnormalities in *Borrelia burgdorferi* infection. *Ann NY Acad Sci* 539:431-433, 1988.

36. Golightly MG, Thomas JA, Dattwyler RJ, Volkman D: Modulation of natural killer cells by *Borrelia burgdorferi*. *Ann NY Acad Sci* 539:103-111, 1988.

37. Beck G, Habicht GS, Benach JL, et al.: A role for interleukin-1 in the pathogenesis of Lyme disease. *Zbl Bakt Hyg A* 263:133-136, 1986.

38. Habicht GS, Beck G, Benach JL, et al.: Lyme disease spirochetes induce human and murine interleukin 1 production. *J Immunol* 134:3147-3154, 1985.

39. Sigal LH, Steere AC, Dwyer JM: In vitro interleukin-1 (IL-1) production by peripheral blood mononuclear cells (PBMC) in Lyme disease. *Arthritis Rheum* 30:510, 1987.

40. Benach JL, Coleman JL, Garcia-Manco JD: Biological activity of *Borrelia burgdorferi* antigens. *Ann NY Acad Sci* 539:115-125, 1988.

41. Henriksson A, Link H, Cruz M, et al.: Immunoglobulin abnormalities in cerebrospinal fluid and blood over the course of lymphocytic meningoradiculitis (Bannwarth's syndrome). *Ann Neurol* 20:337-345, 1986.

42. Henriksson A, Link H: Prolonged IgM response within the central nervous system in lymphocytic meningoradiculitis (Bannwarth's syndrome). *N Engl J Med* 313:1231, 1985.

43. Link H, Olsson T, Baig S, et al.: B-cell response on the single cell level in CSF and peripheral blood (PB) over the course of Lyme disease. *Ann NY Acad Sci* 539:389-392, 1988.

44. Schmidli J, Hunziker T, Moesli P, Schaad UB: Cultivation of *Borrelia burgdorferi* from joint fluid three months after treatment of facial palsy due to Lyme borreliosis. *J Infect Dis* 158:905-906, 1988.

45. Reznick JW, Braunstein DB, Walsh RL, et al.: Lyme carditis electrophysiologic and histopathologic study. *Am J Med* 81:923-927, 1986.

46. Pachner AR: Spirochetal diseases of the CNS. *Neurol Clin* 4:207-222, 1986.

47. Sigal LH: Lyme disease, immunologic manifestations and possible immunopathogenetic mechanisns. *Semin Arthritis Rheum* 18:151-167, 1989.

48. Steere AC, Brinckerhoff CE, Miller DJ, et al.: Elevated levels of collagenase and prostaglandin E2 from synovium associated with erosion of cartilage and bone in a patient with chronic Lyme arthritis. *Arthritis Rheum* 23:591-599, 1980.

49. Fumarola D, Munno J, Marcuccio C, Miragliotta G: Endotoxin-like activity associated with Lyme disease *Borrelia. Zbl Bakt Hyg A* 263:142-145, 1986.

50. Coleman JL, Benach JL: Isolation of antigenic components from the Lyme disease spirochete: Their role in early diagnosis. *J Infect Dis* 155:756-765, 1987.

51. Cooke TDV, Sumi M, Maeda M: Deleterious interactions of immune complexes in cartilage of experimental immune arthritis. *Clin Ortho* 193:235-245, 1985.

52. van de Putte LBA, Lens JW, van den Berg WB, Kruijsen MWM: Exacerbation of antigen-induced arthritis after challenge with intravenous antigen. *Immunology* 49:161-167, 1983.

53. Fitzgerald TJ: The pathogenesis and immunology of *Treponema pallidum*. *Ann Rev Microbiol* 35:29-54, 1981.

54. Sigal LH, Tatum AH: Lyme disease patient sera contain IgM antibodies to *Borrelia burgdorferi* that crossreact with neuronal antigens. *Neurology* 38:1439-1442, 1988.

55. Wilske B, Schierz G, Preac-Mursic V, et al.: Intrathecal production of specific antibodies against *Borrelia burgdorferi* in patients with lymphocytic meningoradiculitis (Bannwarth's syndrome). *J Infect Dis* 153:304-314, 1986.

56. Murray N, Kristoferitsch G, Preac-Mursic G, et al.: Specificity of CSF antibodies against components of *Borrelia burgdorferi* in patients with lymphocytic meningoradiculitis (Bannwarth's syndrome). *J Neurol* 233:224-227, 1986.

57. Pachner AR, Steere AC, Sigal LH, et al.: Antigen-specific proliferation of CSF lymphocytes in Lyme disease. *Neurology* 35:1642-1644, 1985.

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Lyme Disease in Small Animals

BARRY A. LISSMAN, DVM

Dogs and cats can contract Lyme disease. The most common symptom in cats is lameness. The most common symptoms in dogs include lameness, arthralgia, arthritis, lethargy, anorexia, fever, lymphadenopathy, generalized pain, and neurologic, cardiac, and renal disease. Response to early treatment with antibiotics is favorable.

Lyme disease was first reported in a dog from a Long Island, New York, clinical setting in 1983.[1] Since then the disease has been reported throughout most of the United States, with endemic areas in New York, Connecticut, New Jersey, Wisconsin, and Minnesota. Lyme disease is seen in both cats and dogs.

CATS

Very few confirmed cases of Lyme disease actually have been reported in cats; the reasons include: cats are efficient groomers and may not allow the ticks to stay on them long enough to transmit the organism; symptoms may not be as pronounced clinically as they are in dogs; owners may miss early signs; cats may have some inherent resistance to borreliosis; and many cats remain indoors their entire lives. The most frequent manifestation in cats is lameness: cats appear to be lame more frequently in the forelimbs, and respond favorably to early treatment with amoxicillin or tetracyclines. Further research is needed to identify the course of the disease in cats both clinically and serologically.

DOGS

Clinical manifestations of Lyme disease in dogs can be divided into early and late (persistent) infections. In early infections, lameness is the most com-

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mon finding. Arthralgia and arthritis most commonly are found in the carpal and stifle joints with swelling of the carpal joints being pronounced in many cases. Involvement may include one or more joints, may be of short or long duration, and may show single or intermittent periods of lameness.[2] X-rays usually reveal soft tissue swelling around the affected joint, and may show effusion into the joint. Dogs may be lethargic or anorexic, and fever is common, but not always seen, as is lymphadenopathy.[1-6] Erythema migrans (EM), the skin lesion commonly seen in early Lyme disease in humans, rarely is seen in dogs. The lesion is a circular, expanding rash with a pale area inside a darker border, similar to a target. It usually is in the area of a recent tick bite, and is seen in the areas with the least amount of hair. It is unknown at this time if dogs commonly have EM, or if it is undetected due to the hair coat.

Dogs with Lyme disease have been reported to have generalized pain, especially in the cervical region. Radiographs usually do not display any lesions. The neurological system also may be affected.[3] Seizures, aggression, change in behavior, and progressive paralysis have been observed in dogs. The cerebrospinal fluid (CSF) usually will show a positive Lyme titer, and response to treatment is not very favorable. Other reported symptoms have included uveitis, hepatitis, renal failure including glomerulonephritis, and cardiac disease including conduction disturbances such as A-V block and VPCs.[7]

> Treatment of Lyme disease in dogs is best accomplished early in the course of the disease with antibiotics. Anti-inflammatory medications, such as aspirin, may be useful for symptomatic relief in cases involving lameness.

In late or persistent infection with Lyme disease, dogs can exhibit a chronic lameness and arthritis—nonresponsive to antibiotics. They also may develop chronic renal disease, cardiomyopathy, or chronic neurological disease.

Treatment of Lyme disease in dogs is best accomplished early in the course of the disease with antibiotics. Anti-inflammatory medications such as aspirin may be useful for symptomatic relief in cases involving lameness. Antibiotics effective against *Borrelia burgdorferi* are tetracycline (10 mg/lb three times a day), doxycycline (2 mg/lb once a day), amoxicillin (5-10 mg/lb two times a day), amoxicillin/clavulanic acid, and penicillin. The antibiotics usually are given for two to four weeks. Dogs that are lame usually respond to treatment within the first few days of treatment. In humans with chronic infections, penicillin has been used intravenously. Ceftriaxone is administered intravenously to humans with neurological or chronic Lyme disease as it is effective in crossing the blood-brain barrier; however, little is known about its use in dogs; its very high cost makes it impractical for routine use.

Diagnosis of Lyme disease in dogs should be based on clinical findings and positive serology. A history of tick infestation or visits to endemic areas also would be useful. Culture of the organism from blood, synovial fluid, urine, or CSF is diagnostic; however, difficulty in culturing *Borrelia* makes this very impractical. ■

REFERENCES

1. Lissman BA, Bosler EM, Camay H, et al.: Spirochete-associated arthritis (Lyme disease) in a dog. *J Am Vet Med Assoc* 185:219-220, 1984.
2. Magnarelli LA, Anderson JF, Schreier AB, et al.: Clinical and serologic studies of canine borreliosis. *J Am Vet Med Assoc* 191:1089-1094, 1987.
3. Bosler EM, Cohen DP, Schulze TL, et al.: Host responses to *Borrelia burgdorferi* in dogs and horses. *NY Acad Sci* 539:221-234, 1988.
4. Burgess EC: Exposure of Wisconsin dogs to the Lyme disease spirochete. *Lab Anim Sci* 36:288-290, 1986.
5. Kornblatt AN, Urband PH, Steere AC: Arthritis caused by *Borrelia burgdorferi* in dogs. *J Am Vet Med Assoc* 186:960-964, 1985.
6. Magnarelli LA, Anderson JF, Kaufmann, AF, et al.: Borreliosis in dogs from southern Connecticut. *J Am Vet Med Assoc* 186:955-959, 1985.
7. Levy SA, Duray PH: Complete heart block in a dog seropositive for *Borrelia burgdorferi*. *J Vet Intern Med* 2:138-144, 1988.

Lyme Disease in Large Animals

JOHN E. POST, DVM, PhD

Clinical signs of Lyme disease associated with musculoskeletal, nervous, ocular, reproductive, hepatic, and renal involvement have been recognized in seropositive horses, cows, and goats. Antibiotic therapy for large animals generally is effective.

Clinical Lyme disease in large animals has been recognized only in horses,[1-5] cows,[4,6,8] and goats.[9] Informal reports from practicing veterinarians indicate yearly increases in cases as Lyme disease in animals is not reportable. The clinical features and severity of disease varies and many animals remain asymptomatic even though infected with the causative organism, *Borrelia burgdorferi.*

Most large animal cases have been limited to the geographical areas where *Ixodes dammini* ticks are common. Although these ticks are considered the primary vector of Lyme disease, it now is suspected that other modes of transmission may help disseminate the disease. *Borrelia* spirochetes have been demonstrated in other blood-sucking arthropods such as *Dermacentor variabilis* and *Amblyomma americanum* ticks, mosquitoes, horseflies, and deer flies, but significant transmission by these is uncertain.[10,11] More important in animals is the experimental evidence for oral infection. Mice[12] and ducks[13] have been infected by the oral administration of cultured spirochetes. Organisms have been demonstrated in the urine of infected mammals suggesting that Lyme disease, like leptospirosis, may be spread by urine contact.[4,14] Organisms also have been demonstrated in unpasteurized cows' milk, making this a possible vehicle for oral infection. Transplacental transmission has been recognized in humans and is suspected in animals. It is possible that blood trans-

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fusions and contaminated hypodermic needles could also transmit infection.

Signs similar to those in humans are being observed in increasing numbers of *B. burgdorferi*-seropositive horses, cattle, and goats. These clinical manifestations as well as diagnosis and treatment are discussed.

Horses. In *Ixodes* tick-infested areas, attached nymph and adult ticks are being found on horses, especially under the lower jaw, on the ventral chest and abdomen, on the legs, in the mane, and on the tail. At the site of attachment there is a crusty exudate on the skin surface and a cellulitis-like swelling that can grow to the size of a golf ball. The results of a recent survey of equine clinicians in Lyme-endemic areas in Connecticut and New York described the most common manifestation in terms of lassitude, depression, weakness, fatigue, ataxia, paresis, incoordination, stiffness, recumbency, and variable behavior and attitude changes. Low-grade fever and anorexia may occur. Specific joint swelling with pain, hyperthermia, and lameness, as seen in humans, also is common. Uveitis has been observed and renal and liver involvement may occur as evidenced by elevated BUN, creatinine, and liver enzyme values. One horse developed myocardial conduction problems. Abortions have been observed in a few seropositive mares, though cause and effect have not been proved.

Since all of these signs can have other causes, differential diagnosis is difficult. Absence of other causes; a history of tick bites; a favorable response to antibiotic therapy; and a positive laboratory test for serum antibodies are helpful. However, serology test results are not always diagnostic. Some horses, like many humans, develop disease before antibody levels have reached detectable levels. Also, many seropositive horses are asymptomatic.

Treatment of all Lyme disease cases is based primarily on antibiotic therapy to eliminate the infection. Based on human studies, the tetracyclines and penicillins and, more recently, cephalosporins have been most effective. To prevent relapses, these should be administered for 10 to 14 days or longer at regular dosage levels. The best therapy probably is intravenous tetracycline, but this requires daily veterinary attention. Oral tetracyclines are apt to cause gastrointestinal problems. A long series of intramuscular penicillin injections may cause considerable pain and discomfort. Benzathine penicillin administered intramuscularly every other day is favored. Trimethoprim and sulfas have been reported to be effective. Some horses, like some humans and dogs, may recover without treatment.

Response to tetracycline or penicillin generally is good when treatment is started early. This helps confirm a diagnosis. Chronic cases need to be treated longer and may never recover from structural joint changes. There is some evidence in other species that antibiotic resistance patterns are developing, thus, making the choice of an effective antibiotic more difficult. Nonsteroidal anti-inflammatory drugs, such as phenyl butazone, may be helpful as supportive therapy.

A common question for veterinarians and owners is whether or not to treat clinically normal seropositive horses or other animals because such animals may harbor latent infections. Until better tests are available to determine latency, this question cannot be answered. To eradicate suspected infection in one seropositive horse, penicillin was administered. Within two days, this clinically normal animal developed signs of Lyme disease presumably as a result of a Jarisch-Herxheimer reaction.[17] Such a response suggests that this horse was latently infected.

Cows. Identification of Lyme disease in cattle is somewhat controversial. Using present-day tests for serum antibodies, many cows test positive even though located in areas free of *Ixodes* ticks. Also, in tick-endemic areas, owners rarely find ticks on cows;

however, cows may not be scrutinized as carefully as dogs and horses. Spirochetes that appear to be *B. burgdorferi* have been observed in bovine urine, making this a suspected mode of transmission in the absence of arthropod vectors.[4] There also is the matter of disease expression. Some seropositive herds have numerous clinically affected cows, but others do not. There is, therefore, a suspicion by some that finding *B. burgdorferi* serum antibodies is coincidental, and another agent, perhaps another closely related *Borrelia,* is involved in the herd problems being observed.

The common clinical observations are lameness, single or multiple swollen joints, arthritis, laminitis, weight loss, and diminished milk production. A warm hypersensitive hyperemic skin lesion resembling the erythema migrans rash of humans or simple sunburn has been seen on the udders of some infected cows. Though not proved, abortions and stillbirths in some herds are suspected of being caused by *B. burgdorferi;* in these herds, problems often begin after episodes of stress such as parturition.

Diagnosis depends on recognizing the clinical signs described and ruling out other causes such as traumatically induced carpal hygromas and chronic hock swellings that have been seen for years in cows stabled on concrete floors. As discussed for horses, positive serology tests and recovery with antibiotic therapy help confirm a diagnosis.

As for other species, the currently recommended antibiotics for treatment are tetracyclines and penicillins. Like horses, acute cases respond well and chronic ones poorly, and some recover without treatment. Cows showing only the udder lesions and mildly swollen fetlock joints in one herd recovered without therapy in two weeks. Similar cows treated with oxytetracycline recovered in three to five days. In some problem herds, seropositive cows are being treated with penicillin during their dry period to hopefully prevent clinical problems after parturition.

Goats. Lyme disease also is suspected in goats, since clinical signs similar to those in cattle have been seen in seropositive goats, and ticks have been found. Differential diagnosis is especially difficult, however, since CAE virus and mycoplasma also cause arthritis.

LABORATORY TESTS AND INTERPRETATIONS

The currently available laboratory tests use either IFA or ELISA procedures to measure antibody titers as an indirect indicator of current or previous infection. Since there is no standardization between laboratories, test values vary between different laboratories. Each laboratory must be consulted for appropriate interpretation of their results. To detect infected animals shedding organisms, tests for spirochete proteins in urine have been developed and are being tested. If effective, these will help answer the frequent question of whether or not seropositive animals are infected. Tests to detect infection by dark field microscopy, culturing, or special stains on body fluids and pathology tissues are available at some laboratories but often are unsuccessful. ■

REFERENCES

1. Burgess EC, Gillette D, Pickett JP: Arthritis and panuveitis as manifestations of *Borrelia burgdorferi* infection in a Wisconsin pony. *JAVMA* 189:1340-1342, 1986.
2. Burgess EC, Mattison M: Encephalitis associated with *Borrelia burgdorferi* in a horse. *JAVMA* 191:1457-1458, 1987.
3. Magnarelli LA, Anderson JF, Shaw E, et al.: Borreliosis in equids in northeastern United States. *Am J Vet Res* 49:359-362, 1988.
4. Burgess EC: *Borrelia burgdorferi* infection in Wisconsin horses and cows. *Ann NY Acad Sci* 539:235-243, 1988.
5. Cohen D, Bosler EM, Bernard W, et al.: Epidemiologic studies of Lyme disease in horses and their public health significance. *Ann NY Acad Sci* 539:488, 1988.
6. Burgess EC, Gendron-Fitzpatrick A, Wright WO: Arthritis and systemic disease caused by *Borrelia burgdorferi* infection in a cow. *JAVMA* 191:1468-1470, 1987.
7. Post JE, Shaw EE, Wright SD: Suspected borreliosis in cattle. *Ann NY Acad Sci* 539:488, 1988.
8. Rothwell JT, Christie BM, Williams C, et al.: Suspected Lyme disease in a cow. *Aust Vet J* 66:296-298, 1989.
9. Post JE: Unpublished data.
10. Magnarelli LA, Anderson JF: Ticks and biting insects infected with the etiologic agent of Lyme disease, *Borrelia burgdorferi. J Clin Microb* 26:1482-1486, 1988.
11. Schulze TL, Bowen GS, Bosler EM, et al.: *Amblyomma americanum:* A potential vector of Lyme disease in New Jersey. *Science* 224:601-603, 1984.
12. Burgess EC, Patrican LA: Oral infection of *Peromyscus maniculatus* with *Borrelia burgdorferi* and subsequent transmission by *Ixodes dammini. Am J Trop Med Hyg* 36:402-407, 1987.
13. Burgess EC: Experimental inoculation of mallard ducks *(Anas Platyrhynchos platyrhynchos)* with *Borrelia burgdorferi. J Wildlife Dis* 25:99-102, 1989.
14. Bosler EM, Schultz TL: The prevalence and significance of *Borrelia burgdorferi* in the urine of feral reservoir hosts. *Zentralbl Bakteriol Parasitenkd Infektronskr Hyg Abt 1* 263:40-41, 1986.
15. Steere AC: Lyme disease. *N Engl J Med* 321:586-596, 1989.
16. Habicht GS, Beck G, Benach JL: Lyme disease. *Sci Am* 257:78-83, 1987.
17. Robertson DHH, McMillan A, Young H: *Jarisch-Herxheimer Reaction.* Baltimore, MD, University Park Press, 1980.

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Lyme Disease in New Jersey

MARCIA J. GOLDOFT, MD, MPH
TERRY L. SCHULZE, PhD
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ROBERT A. GUNN, MD, MPH

Lyme disease case reports from 1984 through 1986 suggest different high-risk groups and different disease severity than previously observed; children appear disproportionately at risk. Early recognition of this under-reported disease by physicians and patients is necessary for prompt treatment to reduce complications.

Lyme disease is an infectious disease characterized by a distinctive skin lesion, erythema chronicum migrans (ECM); nonspecific systemic symptoms; arthralgias and arthritis; neurologic syndromes; and cardiac involvement.[1] Symptoms occur in differing combinations and degrees of severity. In New Jersey, the etiologic agent, the spirochete *Borrelia burgdorferi,* is transmitted to humans principally by the deer tick *(Ixodes dammini),* with the Lone-star tick serving as a secondary vector.[2] Lyme disease was first reported in New Jersey in 1978,[3] with subsequent retrospective identification of additional cases from that year and 1979.[4] The disease now is considered endemic throughout the state, with the highest incidence in the coastal and central areas. Results of surveillance for Lyme disease in New Jersey were reported previously for 117 cases occurring 1978 to 1982.[5,6] Data were not collected in 1983. This report presents the descriptive epidemiology of cases occurring in New Jersey from 1984 through 1986.

METHODS

The New Jersey State Department of Health (NJDOH) began receiving physician reports of Lyme

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Drs. Goldoft and Gunn are affiliated with the Centers for Disease Control, Division of Field Services, Epidemiology Program Office. Drs. Goldoft, Schulze, and Parkin are affiliated with the New Jersey State Department of Health, Division of Epidemiology, Communicable Disease Control Services. Requests for reprints may be addressed to Dr. Goldoft, New Jersey State Department of Health, Division of Epidemiology, Communicable Disease Control Service, CN 360, Trenton, NJ 08625-0360.

Table 1. *Clinical and serologic status of Lyme disease cases, New Jersey, 1984-1986.*

Case Criteria		Cases	
Clinical	Serologic	Number	Percent
+	+	115	20
+	—	109	19
+	na	101	18
—	+	73	13
na	+	168	30
Total		566	100

na = Not available on submitted reporting forms.

disease in 1979 and established it as a reportable illness in 1981. Surveillance from 1979 through 1982 used patient and physician interviews to obtain clinical information. Data were not collected in 1983. Beginning in 1984, case reports relied primarily on the State Lyme Disease Surveillance Form, which incorporated many of the criteria of the Centers for Disease Control for Lyme disease.[7] This form requested both clinical information and epidemiologic data relating to tick bites. In 1986, in addition to the existing surveillance system, letters were sent to physicians requesting full clinical reports in situations where the information available was insufficient to make a case determination. Serologic testing for Lyme disease, offered by NJDOH, Division of Public Health and Environmental Laboratories since 1984, was available at the discretion of the attending physicians.

Reports of cases of Lyme disease acquired in New

Table 2. *Clinical presentation of Lyme disease cases, New Jersey, 1978-1982 and 1984-1986.*

	1978-1982			1984-1986		
Symptom	Positive	Negative	Percent Positive	Positive	Negative	Percent Positive
ECM	107	5	96	298	52	85
Fever	59	24	71	220	130	63
Headache	50	24	68	188	140	57
Stiff neck	31	33	91	131	191	41
Headache/stiff neck	24	na	—	101	na	—
Myalgias	38	24	61	186	134	58
Malaise	40	21	66	193	100	66
Sore throat	13	27	33	64	201	24
Nausea/vomiting	21	28	43	79	189	29
Arthralgias	3	na	—	25	na	—
Arthritis	35	na	—	108	na	—
Cardiac	2	9	18	8	82	9
Neurologic	17	9	65	33	73	31

na = Not available on submitted reporting forms.

Table 3. *Serologic status and clinical manifestations of Lyme disease cases, New Jersey, 1984-1986.*

	Clinical Manifestation							
	Arthritis		Neurologic		Meningismus		ECM	
Serology	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Positive	82	76	23	70	45	45	103	34
Negative	10	9	3	9	22	22	102	34
Unknown	16	15	7	21	34	34	94	31
Total	108	100	33	100	101	101*	299	99*

*Total not equal to 100% due to rounding.

Jersey from 1978 through 1986 were reviewed and entered into a dBASE III file if they were clinical cases meeting the definite or probable clinical case definition or serologic cases as determined by a titer of equal to or greater than 1:256 from NJDOH or an outside laboratory. Standard reference populations were obtained from the United States 1980 census data.[8]

RESULTS

Diagnostic criteria. There were 566 reported cases of Lyme disease acquired in New Jersey during the three-year period 1984 through 1986 as shown in Table 1. There were 325 cases that met the clinical case definition; 152 cases had the definite diagnosis, and 173 cases had the probable diagnosis. Only 20 percent of cases met both clinical and serologic criteria for Lyme disease, and 48 percent of cases lacked either clinical information or serologic testing. Of all cases, 19 percent were seronegative while meeting the clinical case definition, and 13 percent did not meet the clinical case definition but were seropositive.

Clinical manifestations. ECM was the most commonly reported symptom. Overall, of 350 clinical records giving information from 1984 through 1986, 298 records (85 percent) had ECM (Table 2). Atypical rashes described in 9 additional records included macular or maculopapular rashes, hives, generalized rashes including one mention of palmar involvement, and a rash considered consistent with erythema multiforme. Of patients with ECM, 103 patients (34 percent) were seropositive, 102 patients (34 percent) were seronegative, and 94 patients (31 percent) did not have serologic tests.

Among cases with clinical information available for analysis, nonspecific systemic symptoms such as malaise, fever, and myalgias were commonly reported in 1984 through 1986 as well as in the earlier study. There were 101 cases reporting both headache and stiff neck, and a negative lumbar puncture was mentioned specifically 18 times as part of the medical evaluation.

Arthritis was reported in 108 cases and arthralgias were reported in an additional 25 cases. The knee joint was the most frequently reported site of arthritis or arthralgias, although involvement of ankles, shoulders, hips, elbows, hands, and wrists also were reported. There were 36 reports of only knee arthritis, 12 reports of other single joint type involvement, and 29 reports of multiple joint involvement. There were 3 reports in which temporomandibular joint symptoms were reported, two reports with no other joint involved.

Other complications not specifically asked on the questionnaire were reported intermittently from 1984 through 1986. There were 33 persons with neu-

Table 4. *Tick bite exposure of Lyme disease cases, New Jersey, 1984-1986.*

	Cases	
Tick Bite Report	Number	Percent
Definite	175	31
Possible	130	23
No	37	7
Unknown	224	40
Total	566	101*

*Total not equal to 100% due to rounding.

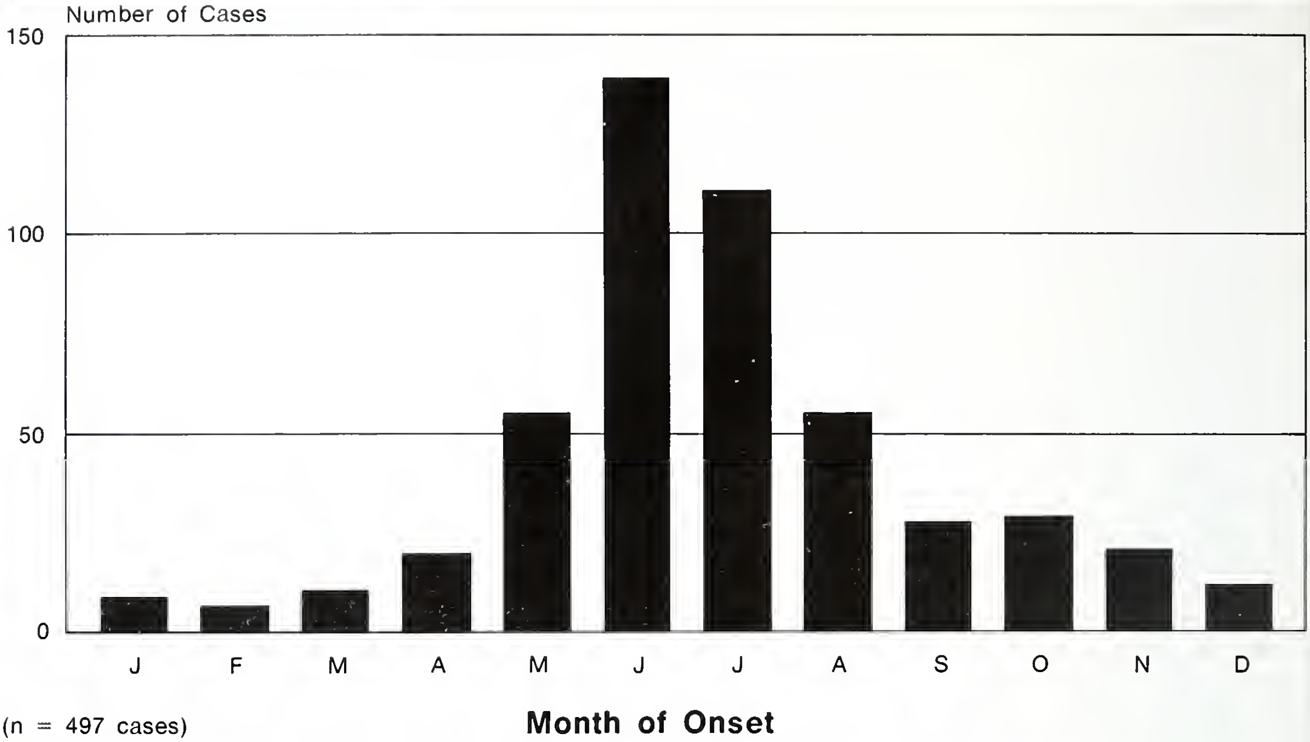

Figure. Lyme disease in New Jersey by month of onset, 1984 to 1986.

rologic complications, including 22 cases of Bell's palsy. Adenopathy was reported for 12 cases. Cases with arthritis, meningismus, or other neurologic complication had higher rates of positive serology than cases with ECM (Table 3).

Descriptive epidemiology. There were 566 cases reported for the three-year period 1984 to 1986, with a median of 189 cases per year and a range of 170 to 217. Although cases were reported from all months, 73 percent of 485 cases had a date of onset in May through August with a peak in June (Figure).

This peak corresponds temporally with the activity of *I. dammini* nymphs. Cases with onset in the other months probably are the result of exposure to *I. dammini* adults. More than half of all cases reported a definite or possible tick bite (Table 4).

For 227 cases, a specific county was reported as the location of a tick bite in the three months prior to the onset of symptoms. Sixteen of the 21 New Jersey counties were reported as the location of a tick bite for at least one Lyme disease case in the three years. Hudson, Morris, Passaic, Sussex, and Warren counties had no reports as the county of exposure in that period. Lyme disease never has been reported from Passaic and Warren counties. Although the eastern coastal counties had been predominant hyperendemic areas, central and west central areas reported increased numbers of cases in 1986, particularly from Mercer county.

The male: female ratio of cases was approximately one:one for the last 3 years, excluding nine cases where laboratory reporting forms lacked sufficient information to determine gender. Among age subgroups, males 10 to 19 years had about twice the number of cases as females in that age group.

Among the 539 cases with gender and age information, 10 percent (n = 52) occurred in persons 4 years old or younger, 27 percent (n = 142) occurred in persons 9 years old or younger, and 44 percent (n = 238) occurred in persons younger than 20 years old (Table 5). Based on census denominators for the state, the highest rate of Lyme disease infection was for those 5 to 9 years old and the second highest rate was for those 4 years or younger (Table 6). For persons 10 to 19 years, the overall rate of reported cases was 7.5/100,000, with males having a rate of 10.6 and females having a rate of 4.3.

DISCUSSION

This study identified an increase in annual cases of Lyme disease for 1984 through 1986, as compared to 1978 through 1982. Prior to 1984, there were 117 case reports in New Jersey. Previously, the maximum number of cases reported for one year was 60

Lyme Disease. An inflammatory disorder, first recognized in Lyme, Connecticut; typically it occurs during the summer months, transmitted by the tick, *Ixodes;* first reported in New Jersey in 1978.

Table 5. *Age distribution by sex of Lyme disease cases, New Jersey, 1984-1986.*

Age (Years)	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
0-4	27	10	25	10	52	10
5-9	46	16	44	17	90	17
10-19	69	24	27	11	96	18
20-49	101	36	95	37	196	36
>49	39	14	55	21	94	17
Unknown	1	0	10	4	11	2
Total	283	100	256	100	539*	100

*Remaining cases lacked age information.

cases in 1982[5,6] while there were 179 cases in 1984, 170 cases in 1985, and 217 cases in 1986. This pattern of increasing numbers of cases may represent either a true increase in disease incidence or an artifact of increased reporting. Anecdotal information from county health officers and private laboratories indicates a five- to tenfold under-reporting of cases, suggesting that a true, and possibly underestimated, increase in the cases of Lyme disease in the state has occurred. A similar increase in the incidence of Lyme disease reported in Connecticut[9] supports the observations from New Jersey.

The lack of concordance between clinical and serologic findings noted in the surveillance system may result from several factors. ECM may precede the rise in titers, providing a clinical diagnosis, but with negative serology. In contrast, an atypical clinical course or a diagnosis after an extended period may result in insufficient information to meet the clinical case definition, although the infection is present and the titers elevated. Seronegativity has been reported for patients with objective symptoms of Lyme disease responsive to parenteral antibiotic treatment.[10]

Based on the 1984 through 1986 case reports, both sexes appear equally at risk of contracting Lyme disease for major age groups with the possible exception of adolescence. Connecticut results have similarly shown an equal male:female ratio.[9,11] Previous studies in New Jersey had identified a male preponderance in cases,[5,6] which may have resulted due to a high rate of reporting from a military base where the physicians were more aware of the disease than the general medical community.

Children less than ten years old appear to be at increased risk for contracting Lyme disease in New Jersey, with rates of reported cases approximately twice those for other age groups. An increased risk for Lyme disease was noted for younger persons in one study from Connecticut,[9] although another study from that state found the risks similar until the fourth decade.[11] If this risk actually exists, it may reflect children's greater participation in outdoor recreational activities and lesser attention to prompt tick removal.

Geographic distribution of cases occurring in 1978 through 1982 was primarily in southern and coastal areas. A wider distribution occurred in 1984 through 1986 with a shift to include more westerly counties. By extension, this expansion of disease reporting may result from an increased geographic range for the vector.

Table 6. *Rates of Lyme disease cases by age distribution, New Jersey, 1984-1986.*

Age (Years)	Number	Rate/100,000
0-4	52	11.2
5-9	90	17.7
10-19	96	7.5
20-49	196	6.5
>49	94	4.5
Total	566	7.7

In earlier New Jersey studies of Lyme disease, there was a greater prevalence of ECM. In previous series, including a New Jersey study, severe clinical manifestations were reported in relatively high frequency with arthritis present in about half of the patients, Bell's palsy in 10 percent of the patients, and meningitis in 10 to 25 percent of the patients.[5,6,9,12-14]

Lyme disease reports in New Jersey over the last three years therefore suggest different risk groups than had been found for earlier cases. An additional finding was that fewer patients are being diagnosed with chronic manifestations of illness as compared to previous case series for the state. In particular, arthritis was present in only a quarter of patients. The observed reduction in New Jersey of more severe clinical manifestations may result from earlier disease recognition by patients and physicians with subsequent prompt and appropriate therapy.

Patient age, gender, geographic location, and even history of tick bite may not immediately suggest Lyme disease to the health care provider. The diagnosis is best made on clinical grounds, which may precede the titer elevation. Prompt antibiotic therapy may abort antibody response.[15] Physicians must evoke clinical suspicion even in the absence of a history of tick bite. Changing geographic distribution also must be considered since the disease may be present in areas where it previously was rare. Identification of these changes relies on case reporting from health care providers.

Diagnosis of Lyme disease emphasizes clinical features, which is reflected in the preponderance of cases reporting ECM. The serologic tests appear to be specific,[14] but sensitivity of the tests has been questioned, particularly in early cases of Lyme disease.[8,16] It has been suggested that a broader case definition be used for the disease to include persons with incomplete clinical symptoms whose illness can be serologically confirmed.[15]

Continued surveillance through reporting forms is encouraged in order to maintain databases able to identify changes in risk groups for Lyme disease. In mild cases, infected persons must be encouraged to seek medical care before more severe symptoms develop. In these cases, diagnosis should be made on clinical grounds rather than serologic results, and once the diagnosis is made, there should be prompt initiation of antibiotic treatment. Increased public awareness of Lyme disease is necessary to recognize the disease early in its onset and seek timely medical care.

SUMMARY

Lyme disease is a spirochetal infection endemic throughout New Jersey. Case reports from 1984 through 1986 suggest different high-risk groups and different disease severity than had been observed in earlier cases in the state. Both sexes now appear equally at risk, while younger age groups, particularly children less than ten years old, appear to be at increased risk. Mild disease is usual, although classic rheumatologic and neurologic complications can occur. Informal surveys suggest Lyme disease is under-reported by a factor of five- to tenfold in New Jersey. Early recognition by physician and patient is necessary for prompt treatment to reduce complications. ■

REFERENCES

1. Steere AC, Malawista SE, Hardin JA, et al.: Erythema chronicum migrans and Lyme arthritis: The enlarging clinical spectrum. *Ann Intern Med* 86:689-698, 1977.

2. Schulze TL, Bowen GS, Bosler EM, et al.: *Amblyomma americanum:* A potential vector of Lyme disease in New Jersey. *Science* 244:601-603, 1984.

3. Ward LC: A case of Lyme disease acquired in New Jersey. *J Med Soc NJ* 78:469-470, 1981.

4. Slade JD, Lenz PP: Lyme disease in New Jersey: A cluster of four cases and 11 sporadic cases. *J Med Soc NJ* 79:496-500, 1982.

5. Bowen GS, Griffin M, Haynes C, et al.: Clinical manifestations and descriptive epidemiology of Lyme disease in New Jersey, 1978 to 1982. *JAMA* 251:2236-2240, 1984.

6. Bowen GS, Schulze TL, Parkin WL: Lyme disease in New Jersey, 1978-1982. *Yale J Bio Med* 57:661-668, 1984.

7. Schmid GP, Horsley R, Steere AC, et al.: Surveillance of Lyme disease in the United States, 1982. *J Infect Dis* 151:1144-1149, 1985.

8. United States Department of Commerce, Bureau of the Census: 1980 Census of Population, Volume 1, Chapter B, Part 32. August 1982.

9. Steere AC, Taylor E, Wilson ML, et al.: Longitudinal assessment of the clinical and epidemiological features of Lyme disease in a defined population. *J Infect Dis* 154:295-300, 1986.

10. Dattwyler RJ, Volkman DJ, Luft BJ, et al.: Seronegative Lyme disease. *N Engl J Med* 319:1441-1446, 1988.

11. Malawista SE, Steere AC: Lyme disease: Infectious in origin, rheumatic in expression. *Adv Intern Med* 31:147-166, 1986.

12. Shrestha M, Grodzicki RL, Steere AC: Diagnosing early Lyme disease. *Am J Med* 78:235-240, 1985.

13. Steere AC, Bartenhagen NH, Craft JE, et al.: The early clinical manifestations of Lyme disease. *Ann Intern Med* 99:76-82, 1983.

14. Mertz LE, Wobig GH, Duffy J, Katzmann JA: Ticks, spirochetes, and new diagnostic tests for Lyme disease. *Mayo Clin Proc* 60:402-406, 1985.

15. Steere AC, Grodzicki RL, Kornblatt AN, et al.: The spirochetal etiology of Lyme disease. *N Engl J Med* 308:733-742, 1983.

16. Hanrahan JP, Benach JL, Coleman JL, et al.: Incidence and cumulative frequency of endemic Lyme disease in a community. *J Infect Dis* 150:489-496, 1984.

NOTEBOOK

UMDNJ NOTES

The University of Medicine and Dentistry of New Jersey (UMDNJ) granted professional degrees and certificates to more than 700 students—285 doctor of medicine degrees—at its 17th annual commencement ceremony at the Garden State Arts Center, Holmdel. UMDNJ also awarded the University Medal to T. Edward Hollander, New Jersey Chancellor of Higher Education, and posthumously, to Sammy Davis Jr, the acclaimed entertainer noted for his humanitarian endeavors. Basil G. Bibby, DMD, PhD, dental scientist and educator, was accorded an honorary degree for his pioneering work on fluoride. UMDNJ's Distinguished Alumnus Award was given to Albert D. Pacifico, MD, an internationally renowned cardiac surgeon.

Scientists at UMDNJ-New Jersey Medical School have shown for the first time that the lives of lethally irradiated mice can be prolonged by injecting them with blood from the human umbilical cord. The researchers believe that human umbilical cord blood apparently supported the immune system of the mice through the critical period when they might have died and also contained cells that were able to generate new blood.

This project's outcome—getting the recipient of one species to successfully accept cord blood cells from a different species—is noteworthy because the immune systems of the mouse and human are not alike. Transplanted cells are far more prone to being accepted if the recipient and the donor are of the same species, the research team said, because their immune systems are the same. It is the first time scientists have succeeded in growing human tissue in mice whose immune systems were intact prior to irradiation. Previously, human tissue had been grown only in mice born without immune systems. The researchers believe that the success of this project increases the odds that human umbilical cord blood cells could be used instead of bone marrow for patients with leukemia and other blood diseases that may require a bone marrow transplant.

Nearly 80 percent of all Americans will experience back problems in their lifetime, but golfers drive up those odds considerably, according to surgeons at UMDNJ-Robert Wood Johnson Medical School. Orthopedic surgeons at the school found that golfers put excessive stress on the lower back, equalling up to eight times their body weight each time they swing. This stress, in addition to the twisting and turning of the back and torso, can lead to herniated discs, spinal stress fractures, and a variety of back-muscle strains.

According to a study of eight golfers—four professionals and four amateurs—the amateur golfers tended to put more pressure on their backs because of inconsistent mechanics. Their total pressure and lateral bending scores were 80 percent higher than professional golfers while their torque readings (twisting levels) were 50 percent higher.

The study was led by Dr. Timothy Hoser, clinical assistant professor of surgery.

Researchers at UMDNJ-Robert Wood Johnson Medical School have found a new use for a synthetic collagen originally developed to heal skin ulcers. The collagen, protein made from purified cowhide skin, may help repair the most commonly damaged part of the knee—the torn anterior cruciate ligament. The researchers say the collagen ligament not only lends support to the injured ligament but also promotes the formation of new ligament tissue. The result, it is hoped, will be a stronger, healthier knee. The collagen was designed several years ago by Dr. Fred Silver, associate professor of pathology at UMDNJ-Robert Wood Johnson Medical School, as skin replacement for patients suffering skin loss. Dr. Michael Dunn, assistant professor of surgery, is leading the ligament research.

A study of automobile drivers in two New Jersey counties will help to determine whether an intensive information campaign can increase the use of seatbelts. The one-year study is sponsored by the New Jersey Division of Highway Traffic Safety. The data will be analyzed and presented by the Level I New Jersey State Trauma Center at UMDNJ-University Hospital, Newark. Public employees in the two counties will be observed without their knowledge to determine how many of them wear seatbelts. The Division of Highway Traffic Safety then will blitz one county with an extensive public-awareness campaign and do nothing in the other. To preserve the integrity of the study, the two counties will not be identified.

Employees will continue to be surveyed to determine if seatbelt use increases or decreases in either county as the result of the educational campaign. ☐ Stanley S. Bergen, Jr, MD

MSNJ AUXILIARY

The following address was presented by Mrs. Jane Lorber at her inauguration as MSNJ Auxiliary president:

Have you noticed that women today do not like to be "Auxiliary" anything? We prefer to be counted as persons in our own right rather than as props for our husbands. I believe that is what this organization allows us to be—persons in our own right. We are married to physicians but we are more than just wives. Many of us are working women with career responsibilities; and most of us are mothers with maternal responsibilities. We know about the lonely nights, the cold dinners, and the heavy burden of feeling like both mother and father to our children. We know that medicine is a jealous mistress and our husbands are enthralled in a lifelong romance. So we must, first of all, accept that. Then, we must fashion lives for ourselves around that central fact.

If we are realistic, we should be excited by the challenge. Our husbands, by their very nature, are smarter than average. The fact that we are married to these outstanding individuals says much about us. We are no dummies, or we would not be here. We have everything it takes to stand on our own two feet and command respect. We are more than tea parties, fur coats, and jewelry. Let us reach out to one another and to the world around us and extend our considerable talents to make our own special mark.

Reaching out—that is what I would like us to do. We have to help others as only we can. We need to reach out to our communities and address the problems of drugs, adolescence, child safety, and health education. Our fall seminar will focus on AIDS education as well as the effects of smoking. Again, we will invite educators and high school students. Additionally, we will urge our county auxiliaries to continue providing health career scholarships.

Dr. and Mrs. Richard Lorber, and their two children, Brian and Jennifer, at the Medical Society of New Jersey Annual Meeting.

We also must reach out to our own—to the widows of physicians who do not know where to turn for advice on how to close an office, sell a practice, or refer patients; to the families of impaired physicians shocked and stunned by a burden too heavy to be borne; to impaired spouses who have lost their way; and to the families of physicians being sued for malpractice who must deal with the anger and frustration such a devasting event can bring. We must let them know we are here for whatever they need.

And, we must reach out to the young wives of physicians new in residency or new in practice who are unsure of themselves and often involved with children or looking for jobs in a new community. If we can help these women, we will be promoting the long-term growth of this organization. If all we do is call on the phone and say "join us" or invite them to a get-together, we are not truly reaching out. We must call and say "I know it is tough because I have been where you are and we, the Auxiliary, want to help. What do you need?"

We also must support and encourage the efforts of organized medicine. The physicians who participate at the county and state levels often need to learn new skills of communication and leadership styles. In the coming year, we hope to set up a joint leadership training session for members of MSNJ and the Auxiliary to develop the skills we need to preserve the best medical system in the world today.

Let us not forget that the honor and dignity of the medical profession are under constant attack by the media and by members of the state and federal governments. For several years, the Auxiliary has played an active role in providing useful information to such entities. This year, we hope to inaugurate the first "joint legislative day" in Trenton, with participation by members of both the Society and Auxiliary. This is hard work. It can be done only by those with sure knowledge of the issues and a thick skin. It can be done only by those of us who are willing to get out in public and fight for the medical profession. It can only be done by dedicated Auxiliary members and here we are—ready to reach out to the community, to the legislature, and to each other.

Let us pledge ourselves right now to work for the common good and to command the respect we deserve as women. Is it difficult? Yes. Is it challenging? Yes. Can we do it? Absolutely! I reach out to each and every one of you today—join me in this challenge. Together we can make this world a better place. ☐ Jane Lorber

INTEREST CHARGES

The following is the opinion of the Judicial Council concerning interest charges. This opinion officially was adopted on March 8, 1989.

A physician who has experienced problems with delinquent accounts may properly choose to add interest or other reasonable billing charges to delinquent accounts. The patient must be notified in advance of the interest or service charges by means of posting a notice in the waiting room, the distribution of leaflets in the office, and appropriate notations on billing statements. The physician must comply with state law which limits interest to the rate approved by the state supreme court. The approved rate changes annually. The rate until November 1990 is 8 percent. Physicians are encouraged to make exceptions in hardship cases.

The Council does not believe it is appropriate to add attorney fees, court costs, or collection costs to the amount owed. If, however, costs and fees are added by court determination, it is appropriate to collect them. ☐

PLACEMENT FILE

The following physicians have written to the Executive Offices of MSNJ seeking information on practice opportunities in New Jersey. The information listed below has been supplied by the physicians. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

INTERNAL MEDICINE

Marc Kesselhaut, MD, 1 Rustic Ridge, C16, Little Falls, NJ 07424. St. George's (Grenada) 1986. Board eligible. Solo or partnership in Mercer, Somerset, Burlington, Hunterdon, or Middlesex counties. Available September 1990.

Suresh Reddy, MD, 3301 Cobblestone Cir., #6, Waterloo, IA 50703. Kakatiya Medical College (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

NUCLEAR MEDICINE

Haresh P. Solanki, MD, 3 West Elm St., Islip, NY 11751. MP Shah Medical College (Iran) 1980. Board eligible. Group or hospital-based. Available July 1990.

PATHOLOGY

Judith Vople, MD, 106 Orlando Blvd., Toms River, NJ 08757. UMDNJ 1985. Board eligible. Group or hospital-based. Available July 1990.

PHYSICAL MEDICINE AND REHABILITATION

Robert B. Thorne, MD, 112 Woodside Ave., Trenton, NJ 08618. Rutgers 1980. Board certified. Part time or full time. Available.

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ANESTHESIOLOGY

September

18 **Anesthesiology Meeting**
6-9 P.M.—Ramada Inn, Clark
(New Jersey State Society of Anesthesiologists)

22 **Tenth Annual Clinical Anesthesia Meeting**
8 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

INFECTIOUS DISEASE

August

1 **Counseling and Testing for HIV Infection**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ and NJDOH)

15 **Clinical Management of HIV Infection**
1-2 P.M.—VA Medical Center, Lyons
(AMNJ and NJDOH)

21 **Clinical Management of HIV Infection**
12 Noon-1 P.M.—Englewood Hospital, Englewood
(AMNJ and NJDOH)

21 **Clinical Management of HIV Infection**
7:30-8:30 A.M.—Mercer Medical Center, Trenton
(AMNJ and NJDOH)

21 **AIDS Training and Resource Program**
8-9 A.M.—Wallkill Valley Hospital and Health Center, Sussex
(AMNJ and NJDOH)

23 **Counseling and Testing for HIV Infection**
12 Noon-1 P.M.—Englewood Hospital, Englewood
(AMNJ and NJDOH)

September

5 **AIDS Training and Resource Program for Hospital Health Educators**
2-3 P.M.—John E. Runnells Hospital, Berkeley Heights
(AMNJ and NJDOH)

14 **AIDS Training and Resource Program for Hospital Health Educators**
9:30-11:30 A.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ and NJDOH)

17 **Counseling and Testing for HIV Infection**
10-11 A.M.—Hackensack Medical Center, Hackensack
(AMNJ and NJDOH)

20 **Using Counseling and Testing as a Management Strategy for the HIV Infected Individual**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ and NJDOH)

24 **Clinical Management of HIV Infection**
10-11 A.M.—Hackensack Medical Center, Hackensack
(AMNJ and NJDOH)

26 **AIDS Training and Resource Program for Hospital Health Educators**
9-10 A.M.—Hackensack Medical Center, Hackensack
(AMNJ and NJDOH)

MEDICINE

August

7 **Grand Rounds**
14 8:30-10 A.M.—Elizabeth General
21 Medical Center, Elizabeth
28 *(Elizabeth General Medical Center)*

7 **Topics in Public Health**
12:15-1:30 P.M.—John Fitch Plaza, Trenton
(NJDOH and AMNJ)

14 **Head Trauma in Children**
9:30-10:30 A.M.—Shore Memorial Hospital, Somers Point
(Shore Memorial Hospital)

16 **New Treatment Modalities and Implications for the Future in Diabetes**
7:30-8:30 P.M.—Freehold Area Hospital, Freehold
(AMNJ)

23 **Newer Cardiac Drugs and Local Anesthetic Interactions**
12 Noon-1 P.M.—Freehold Area Hospital, Freehold
(AMNJ)

September

4 **Grand Rounds**
11 8:30-10 A.M.—Elizabeth General
18 Medical Center, Elizabeth
25 *(Elizabeth General Medical Center)*

7 **Modern Surgical Treatment of Peptic Ulcer Disease**
7:30-8:30 A.M.—Freehold Area Hospital, Freehold
(AMNJ)

10 **Diabetes in Pregnancy**
12 Noon-1 P.M.—Warren Hospital, Phillipsburg
(AMNJ)

10 **Hepatitis**
7-8 P.M.—Wallkill Valley General Hospital, Sussex
(AMNJ)

11 **Topics in Public Health**
25 12:15-1:30 P.M.—John Fitch Plaza, Trenton
(AMNJ)

12 **New Practice Program**
8 A.M.-3:30 P.M.—MSNJ, Two Princess Road, Lawrenceville
(MIIENJ)

27 **Chronic Pain Management and Issues Related to Iatrogenic Addiction**
8-9 P.M.—Freehold Area Hospital, Freehold
(AMNJ)

ONCOLOGY

August

9 **Tumor Board**
9-10 A.M.—Irvington General Hospital, Irvington
(Irvington General Hospital)

10 **Tumor Board Meeting**
11 A.M.-12 Noon—Wallkill Valley Hospital Center, Sussex
(Wallkill Valley Hospital Center)

13 **Tumor Board Case Presentation**
9-10 A.M.—Irvington General Hospital, Irvington
(Irvington General Hospital)

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PSYCHIATRY

August

2 **NMR: Application to Affective Illness and Lithium**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

7 **Psychiatry Grand Rounds**
14 8:30-10 A.M.—Elizabeth General
21 Medical Center, Elizabeth
28 *(Elizabeth General Medical Center)*

9 **Foods, Fats, and Fraud Diets**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

16 **Food and Fitness Habits**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

30 **Brain Imaging and the Electroconvulsive Patient**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

September

4 **Psychiatry Grand Rounds**
11 8:30-10 A.M.—Elizabeth General
18 Medical Center, Elizabeth
25 *(Elizabeth General Medical Center)*

6 **Computerized EEGs—Role in Clinic Psychiatry**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

13 **HIV Spectrum Disorder: Counseling, Psychotherapy, and Pharmacotherapy**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

20 **Premenstrual Syndrome: Diagnosis and Treatment**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

26 **Velvet and Armour**
All day—Carrier Foundation, Belle Mead
(Carrier Foundation)

RADIOLOGY

September

13 **Monthly Meeting**
7:30-9:30 P.M.—Saint Barnabas Medical Center, Livingston
(Radiological Society of New Jersey)

SPECIAL ISSUE

Lyme Disease In New Jersey

Lyme Disease in New Jersey

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IN MEMORIAM

John W. Bromley. A former member of our Passaic County component, John Wickliffe Bromley, MD, died April 1, 1990, at the age of 62. Born in Michigan, Dr. Bromley earned his medical degree from Cornell University Medical College, New York, in 1952. He served an internship at Lenox Hill Hospital, New York, and an orthopedic residency at two New York hospitals, Lenox Hill Hospital and New York University Bellevue Hospital. He received his New Jersey license in 1959 and his California license the previous year. An orthopedic surgeon, Dr. Bromley had a private practice in Paterson, and was affiliated with St. Joseph's Hospital and Medical Center and Wayne General Hospital. Dr. Bromley was a diplomate of the American Board of Orthopedic Surgery, a senior member of the International Society for the Study of the Lumbar Spine, a fellow in both the New York and New Jersey Academies of Medicine, and a member of the New Jersey Orthopedic Society, and of the Eastern Orthopedic Society. Dr. Bromley served in the United States Army from 1953 to 1955, with a terminal rank of first lieutenant.

Harold Davis. Born January 1, 1911, in New York City, general practitioner Harold Davis, MD, died April 28, 1990, at the age of 79. Dr. Davis earned his medical degree from Dalhousie University Faculty of Medicine, Canada, in 1937. After serving in the armed services from 1942 to 1945 as captain, Dr. Davis received his New Jersey medical license in 1945 and had a private practice in Bergenfield until his retirement in 1985. Dr. Davis was a member of our Bergen County component and of the American Medical Association.

Ralph A. Eckhardt. Born on June 8, 1899, in Rochester, New York, Ralph A. Eckhardt, MD, recently died. In 1925, Dr. Eckhardt received his medical degree from Cornell University Medical College, New York. Two years later he earned his New Jersey medical license. Dr. Eckhardt had a general private practice in Madison and was affiliated with Morristown Memorial Hospital and with the former All Souls Hospital, Morristown. He was a member of the American Medical Association and of our Morris County component.

Bernard Friedenthal. A retired general surgeon, Bernard Friedenthal, MD, died at the age of 79. Dr. Friedenthal was born in New York City on April 3, 1911, and earned his medical degree from the University of Berne, Switzerland, in 1936. He served his internship and residency at the former Middlesex General Hospital, New Brunswick, and at the former Fitkin Memorial Hospital, Neptune, respectively. After receiving his New Jersey medical license, Dr. Friedenthal had a general practice in the New Brunswick area for many years. He was affiliated with two New Brunswick hospitals: the former Middlesex General Hospital and St. Peter's Medical Center. During World War II, he served in the United States Medical Corps achieving the rank of lieutenant colonel. Dr. Friedenthal was a member of our Middlesex County component and of the American Medical Association, and a fellow of the American Association for the Advancement of Science and of the International College of Surgeons.

Jutta A. Gabe. Cherry Hill resident, Jutta Anna Gabe, MD, died on March 5, 1990. Born in Germany in 1924, Dr. Gabe received her medical degree from the University of Marburg and Goettingen, Germany, in 1953. She served her internship at Cooper Hospital, Camden, and her residency at Graduate Hospital of the University of Pennsylvania School of Medicine, Philadelphia. In addition, she served a fellowship at the Medical College of Pennsylvania, Philadelphia. In 1959, she was awarded her New Jersey medical license. An anesthesiologist at Cooper Hospital, Dr. Gabe was a member of our Camden County component and of the American Medical Association.

Gregory Jawny. At the age of 90, Gregory Jawny, MD, died on April 18, 1990. Dr. Jawny was born in 1900 and received his medical degree from the University of Vienna, Austria, in 1926. Dr. Jawny earned his New Jersey medical license in 1955. Retired for many years from the active practice of internal medicine, Dr. Jawny had a general private practice in Rutherford and then Jersey City and was affiliated with the former Fairmount Hospital, Jersey City, and Jersey City Medical Center. Dr. Jawny was a member of our Hudson County component and of the American Medical Association.

Martin A. Quirk. Past-president of our Sussex County component in 1930, Martin Aloysius Quirk, MD, died recently. Born in Long Branch on September 16, 1901, he received his medical degree from the University of Pennsylvania School of Medicine, Philadelphia, in 1927 and his New Jersey medical license in 1928. Dr. Quirk served his internship at The Mountainside Hospital, Montclair. Before retiring from active practice, Dr. Quirk had a private pediatric practice in Newton and then relocated to Red Bank. He was affiliated with several area hospitals: Monmouth Medical Center, Long Branch; Riverview Medical Center, Red Bank; and Jersey Shore Medical Center, Neptune. Dr. Quirk was a fellow of the American Academy of Pediatrics, a diplomate of American Board of Pediatrics, and a member of our Sussex County and Monmouth County components. In addition, he served in the United States military as commander from 1942 to 1945.

Bhatrahally K. Venkatesh. Born in India on April 6, 1931, Bhatrahally Krishnarao Venkatesh, MD, died on March 14, 1990. Dr. Venkatesh received his medical degree from the University of Mysore Medical School, India, in 1953. Prior to coming to the United States, Dr. Venkatesh practiced medicine in his native country. He served his residency at several New York hospitals: Memorial Hospital for Cancer and Allied Diseases, Metropolitan Hospital Center, and the former Francis Delafield Hospital. Dr. Venkatesh received his New York medical license in 1971 and his New Jersey medical license in 1973. Dr. Venkatesh was a radiologist at Wayne General Hospital. Dr. Venkatesh was a professor of radiology at New York Medical College for almost ten years. He was a member of the Radiology Society of North America, of our Passaic County component, and of the American Medical Association; he was a fellow of the American College of Radiology.

Abram Vermeulen. General surgeon, Abram Vermeulen, MD, died May 6, 1990, at the age of 77. He was a resident of Prospect Park and Ridgewood. Born in Paterson, on July 10, 1912, Dr. Vermeulen received his medical degree from Northwestern University Medical School, Chicago, in 1936. He served an internship at Paterson General Hospital. Dr. Vermeulen was affiliated with Wayne General Hospital; Valley Hospital, Ridgewood; and Christian Health Care Center, Wyckoff. In addition, Dr. Vermeulen was a member of our Passaic County component and of the American Medical Association; he was a fellow of the American College of Surgeons.

Julius Winston. Retired for many years from the practice of otolaryngology, Julius Winston, MD, died on March 25, 1990, at the age of 88. Born in Philadelphia, Dr. Winston earned his medical degree from Jefferson Medical College, Philadelphia, in 1926. He served his internship at St. Mary's Hospital, Philadelphia. Dr. Winston received his Pennsylvania medical license in 1927. He had his practice for many years in Philadelphia before relocating to Atlantic City; he received his license to practice medicine in New Jersey in 1948. Dr. Winston was affiliated with Temple University Hospital, Philadelphia. Throughout his long medical career, Dr. Winston was professor of otolaryngology at Graduate Hospital, University of Pennsylvania, Philadelphia. Dr. Winston also was a member of the Philadelphia College of Physicians, of the Philadelphia Laryngological Society, of the American College of Surgeons, of the Pennsylvania State Medical Society, of our Atlantic County component, and of the American Medical Association. From 1926 to 1931, Dr. Winston served in the Medical Reserves as first lieutenant.

H. Edward Yaskin. Born in Philadelphia, on November 7, 1909, H. Edward Yaskin, MD, died at the age of 80. Dr. Yaskin earned his medical degree from Jefferson Medical College, Philadelphia, in 1935 and his New Jersey and Pennsylvania medical licenses the same year. Dr. Yaskin served his internship at Cooper Hospital, Camden, and residencies at three New York facilities: Montefiore Hospital, New York Psychiatric Institute, and Mount Sinai Hospital. A neuropsychiatrist, Dr. Yaskin had a practice in Pennsylvania before locating to New Jersey. Dr. Yaskin served two neurology fellowships in the early 1940s: the Abrahamson Fellowship and the Ross V. Patterson Fellowship. Dr. Yaskin was affiliated with several hospitals: Camden County Psychiatric Hospital; Thomas Jefferson University Hospital, Philadelphia; St. Luke's and Children's Medical Center, Philadelphia. In addition, he was a professor of the neurology department at Thomas Jefferson University Hospital. Dr. Yaskin was a member of our Camden County component, of the Philadelphia Neurological Society, of the Philadelphia Psychiatric Society, of the New Jersey Neuropsychiatric Society, of the American Academy of Neurology, of the American Psychiatric Association, of the American Neurological Association, and of the Philadelphia County Medical Society.

Send information to:

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Content. The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports; review articles; clinical notes; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and opinions. Editorials are prepared by the editor and by guest contributors on timely and relevant subjects. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevant to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made to an audience in New Jersey.

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1. Goldwyn RM: Subcutaneous mastectomy. *NJ MED* 74:1050-1052, 1977.

2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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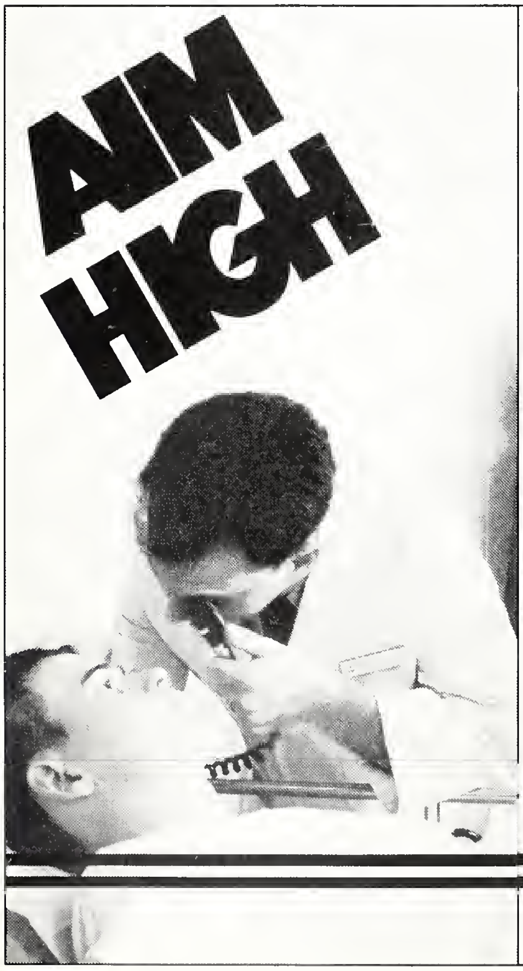

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AIR FORCE

NEWSWATCH

NO-FAULT:
MSNJ GETS INJUNCTION

On July 11, 1990, Judge Lawrence L. Lasser, presiding judge of the Tax Court, granted a temporary restraining order to the Medical Society of New Jersey, requiring that the state maintain any and all funds paid by doctors in a segregated account. Judge Lasser further stated that the Society had demonstrated a reasonable likelihood of success at a later hearing scheduled for September 18. The relief granted is consistent with that issued regarding lawyers, and the two cases have been consolidated. MSNJ was represented by the firm of Kern Augustine Conroy & Isele.

MEDICARE MANDATORY BILLING

Effective September 1, 1990, Medicare law requires physicians to forward a bill to the part B carrier for all services that are "non-assigned." MSNJ and the American Medical Association are seeking to repeal this law.

HCFA has announced that New Jersey physicians will be permitted to use superbills to meet this requirement. The superbill should be attached to the 1500 claim form and sent according to instructions previously provided by Pennsylvania Blue Shield.

MEDICAL WASTE REFUNDS

Medical waste refunds have been sent by the Department of Environmental Protection (DEP) to physicians who filed the reports required by law. Forty percent of the physicians entitled to a refund failed to process a request for a return of money; these physicians will be contacted by DEP. **Please provide** the information requested and return the form to DEP; if you do not, your refund entitlement will revert to the state.

OMBUDSMAN FOR THE ELDERLY
AT IT AGAIN

The state ombudsman just announced he adopted regulations regarding nursing home patients that are consistent with the announcement made in August 1988. The Committee on Biomedical Ethics of the Medical Society of New Jersey expressed outrage at the arrogant stubbornness of the ombudsman in adopting his ill-advised and misguided regulations.

The MSNJ Board of Trustees has authorized the filing of a suit challenging the regulations. MSNJ will be represented by the firm of Kern Augustine Conroy & Isele.

SUPREME COURT RULES IN FAVOR OF PHYSICAL THERAPY BOARD

In a unanimous decision, the Supreme Court reversed the Appellate Division and upheld regulations of the Physical Therapy Board. Those regulations permit: examinations of patients without physician direction, general instruction without physician direction, and modification of a physician-ordered treatment provided the modification is consistent with physician direction.

A therapist may not initiate treatment without prior physician direction nor may a therapist examine a patient for the purpose of diagnosing disease or an organic condition.

All physicians must be alert to instances where the physical therapist does examine and diagnose, and should report such events in detail to MSNJ.

With regard to modification of treatment, patient safety and professional liability concerns require that no modification occur without the prior approval of the physician. This is achievable if the physician states on prescriptions and orders for physical therapy:

> Treatment to be rendered only as indicated and without modification. Any modification of treatment is not consistent with this order unless prior written authorization is issued.

PHYSICIAN ASSISTANT PROPOSAL MOVES FORWARD

The State Board of Medical Examiners has succumbed to pressure from UMDNJ and proposed a regulation to authorize physician assistants in New Jersey.

The MSNJ House of Delegates has directed that MSNJ oppose this action. A hearing is scheduled by the State Board of Medical Examiners on August 15, 1990. MSNJ has retained Judge Herbert Stern to represent the Society. Judge Stern supports our belief that SBME does not have lawful authority to adopt such a regulation.

Physicians should send their written comments to SBME, 28 West State Street, Trenton, NJ 08625.

In addition to the legal arguments against this proposal, MSNJ believes there has been an absolute failure on the part of SBME to demonstrate a need for this hybrid type of practitioner who is not a physician, but will function as one.

MSNJ NEWSLETTER

PRACTICE MANAGEMENT WORKSHOPS

The Department of Practice Management of the AMA is conducting the following workshops in New Jersey: Joining a Partnership or Group (September 6); Starting Your Own Practice (September 7-8); Insurance Processing and Coding (September 10); ICD-9 Coding for Doctor's Offices (September 11); Advanced CPT-4 Coding (September 12); Medical Collections Management (September 12); and Business Side of Medicine (September 13). These workshops will be held at the Cherry Hill Inn, Cherry Hill. For more information, please call 1/312/645-4958.

HEALTH CARE COMMISSION

Governor Jim Florio, stating that there is a "health care cost crisis" in the state of New Jersey, has established a Governor's Commission on Health Care Costs. The Commission has been charged with examining all components of health care costs with a particular focus toward reforming the current uncompensated care payment system. The chairman of the Commission suggested that major reform is necessary in several areas: affordability of health care insurance, improved coordination of the planning and financing of health care services, and reforming the hospital reimbursement system to further contain costs. Commission members include representatives from business, education, industry, organized labor, and the Statewide Health Coordinating Council.

STATE HEALTH PLAN

The State Commissioner of Health, Dr. Frances Dunston, called for the development of an updated and comprehensive state health plan. Dr. Dunston noted that the last state health plan was completed in the early 1980s. In addition to planning for the provision of the appropriate mix and level of medical services, the Commissioner indicated that the state health plan could be used as a means of controlling costs while improving access to essential care. In an effort to support the planning process, Dr. Dunston wants to continue the regional health planning agencies that review certificate of need applications.

MOMS PROGRAM DELAY

The Health Care Administration Board has decided to delay the implementation of the Maternity Outreach and Managed Services (MOMS) program. The MOMS program was to provide $3.7 million for prenatal care for low-income, uninsured pregnant women. The delay was requested by the commissioner of health due to questions surrounding the funding of the program. The proposed method of funding was to draw funds from the Uncompensated Care Trust Fund. However, the commissioner did not want to place any additional burdens on the Trust Fund. An alternative that may be explored is expansion of Medicaid eligibility guidelines for pregnant women.

TRANSPLANT COSTS

The U.S. Court of Appeals for the Eighth Circuit has ruled an Iowa Medicaid recipient, suffering from severe diabetes, should receive Medicaid coverage for her pancreas transplant. While the state had decided to only cover procedures that were not considered "experimental" by Medicare, the court felt that such designation by Medicare was not an "absolute standard" but an "administrative convenience."

County and Specialty Societies, Academy of Medicine of New Jersey, MSNJ Auxiliary, and AMA Delegation

Attendance at Meetings of the Board of Trustees

January 1990—June 1990

Atlantic County

April 8	Kelly M. Reid, MD, President-Elect

Bergen County

January 21	Matis A. Fermaglich, MD
February 18	Matis A. Fermaglich, MD
March 18	Matis A. Fermaglich, MD
	Patricia G. Klein, MD, President-Elect
April 8	Matis A. Fermaglich, MD
May 5	Alfred A. Alessi, MD

Burlington County

January 21	S. Manzoor Abidi, MD, President-Elect
February 18	S. Manzoor Abidi, MD, President-Elect
	Charles J. Moloney, MD
March 18	S. Manzoor Abidi, MD, President-Elect
May 9	S. Manzoor Abidi, MD, President-Elect

Camden County

March 18	Joseph T. Sokolowski, Jr, MD, President
May 5	George T. Hare, MD

Cumberland County

April 8	Gerald S. Packman, MD, President

Essex County

April 8	Anita Falla, MD
May 5	Arthur R. Ellenberger, Executive Secretary
May 9	George L. Benz, MD, Secretary
	Arthur R. Ellenberger, Executive Secretary

Gloucester County

January 21	Churchill L. Blakey, MD
February 18	Churchill L. Blakey, MD
	George S. Nicoll, MD, President
March 18	Churchill L. Blakey, MD
	George S. Nicoll, MD, President
April 8	Churchill L. Blakey, MD
	George S. Nicoll, MD, President
May 5	Churchill L. Blakey, MD
May 9	Churchill L. Blakey, MD

Hudson County

February 18	Russ C. Camangian, MD, President
March 18	Russ C. Camangian, MD, President
April 8	Russ C. Camangian, MD, President
May 5	Charles L. Cunniff, MD

Mercer County

January 21	Linda L. McGhee, Executive Director
February 18	William H. Hardesty, MD, President
	Linda L. McGhee, Executive Director
	John G. Winant, Jr, MD, President-Elect
March 18	William H. Hardesty, MD, President
	Linda L. McGhee, Executive Director
	John G. Winant, Jr, MD, President-Elect
April 8	Louis G. Fares, MD
	Linda L. McGhee, Executive Director
	John G. Winant, Jr, MD, President-Elect
May 5	Louis G. Fares, MD
	John G. Winant, Jr, MD, President-Elect
May 9	Louis G. Fares, MD
June 10	Louis G. Fares, MD
	Linda L. McGhee, Executive Director
	Gabriel F. Sciallis, MD, President-Elect
	John G. Winant, Jr, MD, President

Middlesex County

February 18	Mary Alice Bruno, Executive Director
	Leticia V. DeCastro, MD
March 18	Victor H. Boogdanian, MD
	Leticia V. DeCastro, MD
April 8	Mary Alice Bruno, Executive Director
	Leticia V. DeCastro, MD
	Bernard A. Rineberg, MD
May 5	Mary Alice Bruno, Executive Director

Monmouth County

January 21	William J. D'Elia, MD
	Walter J. Kahn, MD, President-Elect
March 18	William J. D'Elia, MD

Morris County

March 18	William J. Dowling, Jr, MD, Secretary

Passaic County

January 21	Michael H. Bernstein, MD, President
February 18	Michael H. Bernstein, MD, President
April 8	Michael H. Bernstein, MD, President
June 10	Michael H. Bernstein, MD, Immediate Past-President

Salem County

May 9	Frank L. Redo, MD, President

Union County

January 21	A. Ralph Kristeller, MD
	Irene Rosenthal, Executive Director
February 18	A. Ralph Kristeller, MD
	Frank R. Romano, Sr, MD
	Irene Rosenthal, Executive Director
	Bessie M. Sullivan, MD, President-Elect

March 18 ..... A. Ralph Kristeller, MD
Richard R. Lorber, MD
Frank R. Romano, Sr, MD
Irene Rosenthal, Executive Director
Om P. Sawhney, MD, President
April 8 .... A. Ralph Kristeller, MD
Irene Rosenthal, Executive Director
Om P. Sawhney, MD, President
May 5 .... Andrea Donelan, Administrative Assistant
A. Ralph Kristeller, MD
Frank R. Romano, Sr, MD
Irene Rosenthal, Executive Director
May 9 .... Bessie M. Sullivan, MD, President-Elect
June 10 .... Richard R. Lorber, MD
Irene Rosenthal, Executive Director
Harold S. Yood, MD

Warren County
January 21 ... Robert C. Emery, MD, President
February 18 .. Robert C. Emery, MD, President
March 18 ..... Robert C. Emery, MD, President

New Jersey State Society of Anesthesiologists
January 21 ... Stanley Bresticker, MD
June 10 .... Stanley Bresticker, MD

New Jersey Association of Electromyography and Electrodiagnosis
February 18 .. Kutumba S. Pitta, MD, Vice-President
Michael Sutula, DO, President
March 18 ..... Michael Sutula, DO, President
April 8 .... Kutumba S. Pitta, MD, Vice-President
Michael Sutula, DO, President
May 5 .... Kutumba S. Pitta, MD, Vice-President
June 10 .... Michael Sutula, DO, President

New Jersey Chapter, American College of Emergency Physicians
January 21 ... Rudolf E. Schwaeble, MD
March 18 ..... Rudolf E. Schwaeble, MD
April 8 .... Rudolf E. Schwaeble, MD
May 5 .... Rudolf E. Schwaeble, MD
May 9 .... Rudolf E. Schwaeble, MD
June 10 .... J. Mark Meredith, MD, President-Elect
Rudolf E. Schwaeble, MD

New Jersey Society of Internal Medicine
January 21 ... Barry R. Zitomer, MD, President
March 18 ..... Frank J. Malta, MD
April 8 .... Barry R. Zitomer, MD, President
May 5 .... Frank J. Malta, MD
June 10 .... Frank J. Malta, MD

New Jersey Association of Medical Specialty Societies
January 21 ... Stanley Bresticker, MD
June 10 .... Stanley Bresticker, MD

New Jersey Medical Women's Association
February 18 .. Sandra Samuels, MD, President-Elect
April 8 .... Sandra Samuels, MD, President-Elect

New Jersey Obstetrical and Gynecological Society
January 21 ... John D. Franzoni, MD
February 18 .. John D. Franzoni, MD
March 18 ..... John D. Franzoni, MD
April 8 .... John D. Franzoni, MD
June 10 .... John D. Franzoni, MD

New Jersey Academy of Ophthalmology and Otolaryngology
January 21 ... Saul M. Tischler, MD, President
February 18 .. Saul M. Tischler, MD, President
April 8 .... Saul M. Tischler, MD, President

New Jersey Orthopaedic Society
February 18 .. Morton Farber, MD, Vice-President

New Jersey Chapter, American Academy of Pediatrics
March 18 ..... Stephen M. Golden, MD

New Jersey Psychiatric Association
January 21 ... Thomas R. Houseknecht, MD
February 18 .. Thomas R. Houseknecht, MD

American College of Surgeons, New Jersey Chapter
January 21 ... Ames L. Filippone, Jr, MD
February 18 .. Ames L. Filippone, Jr, MD
March 18 ..... Ames L. Filippone, Jr, MD

New Jersey Society of Thoracic Surgeons
February 18 .. Javier Fernandez, MD, Vice-President
May 5 .... Javier Fernandez, MD, Vice-President

Academy of Medicine of New Jersey
January 21 ... Sherman Garrison, MD
Charles J. Heitzmann, Executive Director
February 18 .. Ronnie Davidson, EdD, Associate Director
Charles J. Heitzmann, Executive Director
March 18 ..... Ronnie Davidson, EdD, Associate Director
Charles J. Heitzmann, Executive Director
April 8 .... Charles J. Heitzmann, Executive Director
May 5 .... Charles J. Heitzmann, Executive Director
June 10 .... Sherman Garrison, MD
Charles J. Heitzmann, Executive Director

Medical Society of New Jersey Auxiliary
January 21 ... Dorothy Espinola, Corresponding Secretary
February 18 .. Dorothy A. Camangian, President, Hudson County Medical Society Auxiliary
Dorothy Espinola, Corresponding Secretary
Sevim Omay, President
March 18 ..... Dorothy A. Camangian, President, Hudson County Medical Society Auxiliary

Jane Lorber, President-Elect
April 8 .... Dorothy A. Camangian, President,
Hudson County Medical
Society Auxiliary
Sevim Omay, President
June 10 .... Jane Lorber, President

AMA Delegation

AMA Delegates

January 21 ... Frederick W. Durham, MD
Ralph J. Fioretti, MD
Karl T. Franzoni, MD
John S. Madara, MD
Henry J. Mineur, MD
Joseph A. Riggs, MD
Edward A. Schauer, MD

February 18 .. Palma E. Formica, MD
Karl T. Franzoni, MD
Joseph A. Riggs, MD
Edward A. Schauer, MD
Frank Y. Watson, MD

March 18 ..... Ralph J. Fioretti, MD
Palma E. Formica, MD
Karl T. Franzoni, MD
John S. Madara, MD
Henry J. Mineur, MD
Joseph A. Riggs, MD
Edward A. Schauer, MD
Robert H. Stackpole, MD
Frank Y. Watson, MD

April 8 .... Palma E. Formica, MD
Karl T. Franzoni, MD
John S. Madara, MD
Henry J. Mineur, MD
Joseph A. Riggs, MD
Edward A. Schauer, MD
Robert H. Stackpole, MD

May 5 .... Frederick W. Durham, MD
Ralph J. Fioretti, MD
Palma E. Formica, MD
Karl T. Franzoni, MD
John S. Madara, MD
Henry J. Mineur, MD
Joseph A. Riggs, MD
Edward A. Schauer, MD
Robert H. Stackpole, MD
Frank Y. Watson, MD

May 9 .... Frederick W. Durham, MD
Ralph J. Fioretti, MD
John S. Madara, MD
Henry J. Mineur, MD
Joseph A. Riggs, MD
Edward A. Schauer, MD
Frank Y. Watson, MD

June 10 .... Karl T. Franzoni, MD
John S. Madara, MD
Henry J. Mineur, MD
Joseph A. Riggs, MD
Edward A. Schauer, MD
Robert H. Stackpole, MD

AMA Alternate Delegates

January 21 ... Harry M. Carnes, MD
Michael M. Heeg, MD
Paul J. Hirsch, MD
Joseph N. Micale, MD
Irving P. Ratner, MD
Carl Restivo, Jr, MD
William E. Ryan, MD
Robert J. Weierman, MD

February 18 .. Harry M. Carnes, MD
Michael M. Heeg, MD
Paul J. Hirsch, MD
Joseph N. Micale, MD
Irving P. Ratner, MD
Robert J. Weierman, MD

March 18 ..... Michael M. Heeg, MD
Paul J. Hirsch, MD
Donald J. Holtzman, MD
Joseph N. Micale, MD
Irving P. Ratner, MD
Carl Restivo, Jr, MD
William E. Ryan, MD
Robert J. Weierman, MD

April 8 .... Harry M. Carnes, MD
Michael M. Heeg, MD
Paul J. Hirsch, MD
Joseph N. Micale, MD
Carl Restivo, Jr, MD
William E. Ryan, MD
Robert J. Weierman, MD

May 5 .... Harry M. Carnes, MD
Paul J. Hirsch, MD
Donald J. Holtzman, MD
Irving P. Ratner, MD
Carl Restivo, Jr, MD
William E. Ryan, MD
Robert J. Weierman, MD

May 9 .... Harry M. Carnes, MD
Paul J. Hirsch, MD
A. Ralph Kristeller, MD
Joseph N. Micale, MD
Carl Restivo, Jr, MD
William E. Ryan, MD
Robert J. Weierman, MD

June 10 .... Paul J. Hirsch, MD
Donald J. Holtzman, MD
A. Ralph Kristeller, MD
Irving P. Ratner, MD
Carl Restivo, Jr, MD
William E. Ryan, MD
Robert J. Weierman, MD

MSNJ NEWSLETTER

HIGHER DOCTOR LIMITS

Cautioning that HHS is moving too fast to control physician costs, the Physician Payment Review Commission (PPRC) has recommended a fiscal 1991 target increase in physician spending at 11.2 percent rather than the 9.9 percent recommended by HHS. HHS has recommended a lower increase in the growth in volume intensity of physican services by proposing a 10.5 percent update for nonsurgical services and an 8.7 percent increase for surgical services. The PPRC recommends 12.1 percent for nonsurgical services and 9.3 percent for surgical services.

O/P REVENUES INCREASE

The Prospective Payment Assessment Commission (ProPAC) has found that outpatient revenue has increased from 12.4 percent of total operating revenue in 1979 to 21.1 percent in 1989. ProPAC found that smaller hospitals depend more on outpatient revenue than larger facilities. Inpatient revenue has decreased from 83.2 percent in 1979 to 74 percent of total operating revenue in 1989. Medicare spending for outpatient services has increased by approximately 300 percent from $2 billion in 1989 to $7.9 billion in 1979.

HOSPITAL CLOSURES

Health and Human Services Inspector General Richard Kusserow has concluded that hospital closures in 1988 did not reduce access to health care. Kusserow's conclusions were based on the fact that hospital closures tended to occur for small hospitals that generally were less than 100 beds and had average occupancy levels of 30 percent, while access to other facilities offering inpatient care was nearby. Hospital closures in 1988 amounted to 88 facilities in 29 states with 50 rural facilities and 38 urban facilities ceasing operations. Patients had to travel no more than ten miles in the urban areas that experienced hospital closings and patients had to travel no more than 20 miles for 75 percent of the rural facilities that closed.

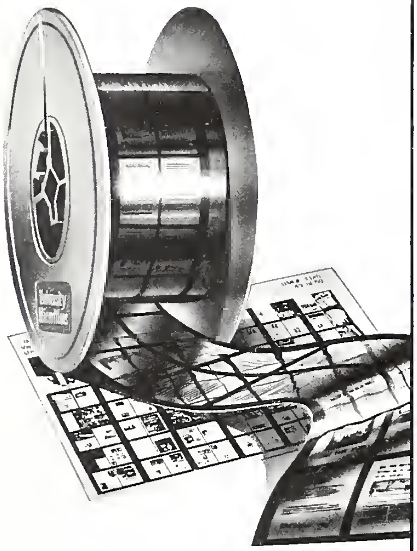
PREMIUM DECLINE

St. Paul Fire and Marine Insurance Co. has filed for decreases in its malpractice insurance premiums in 21 of the 42 states in which it provides such coverage. These premium decreases average 6 percent. St. Paul also has filed for rate increases in three states. This follows the insurance company's 1989 decrease in malpractice premiums averaging 16 percent in 34 states. The number of malpractice claims per 100 physicians has declined from 17 in 1985 to 12 in 1989. The average cost per claim has increased from $28,300 in 1985 to $36,900 in 1989.

CLIA REGULATIONS

A proposed rule to implement the Clinical Laboratory Improvement Amendments (CLIA) of 1988 was published in the *Federal Register*; this publication expands government regulation of laboratories to all settings that perform quantitative, qualitative, or screening tests procedures. This publication is followed by a 90-day period of formal comment. There are presently three basic regulatory tiers—waiver, level I, and level II. Significant changes are expected before the regulations are finalized. The regulations now are tied to the "complexity" of tests. The proficiency testing, patient test management, quality control, and quality assurance requirements are basically the same in both level I and level II. On the behalf of office laboratories that barely qualify for level II, physicians and instrument manufacturers already are calling for a third tier, between level I and II. These tests would be based on instrument complexity and would ease up the stringent personnel and laboratory director requirements in level II. Comments must be received before August 20, 1990. HCFA encourages physicians to comment to the following address: Health Care Financing Administration, Department of Health and Human Services, Attention: HSQ-176-P, P.O. Box 26676, Baltimore, MD 21207.

This publication is available in microform.



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LEVOXINE® *(Levothyroxine Sodium Tablets, USP)* For oral administration

The following is a brief summary. Before prescribing, please consult package insert.

INDICATIONS AND USAGE:

LEVOXINE (L-thyroxine) tablets are indicated as replacement or supplemental therapy for diminished or absent thyroid function, resulting from functional deficiency, primary atrophy, from partial or complete absence of the gland or from the effects of surgery, radiation or antithyroid agents. Therapy must be maintained continuously to control the symptoms of hypothyroidism.

CONTRAINDICATIONS:

L-thyroxine therapy is contraindicated in thyrotoxicosis, acute myocardial infarction and uncorrected adrenal insufficiency.

WARNINGS:

> Drugs with thyroid hormone activity, alone or together with other therapeutic agents, have been used for the treatment of obesity. In euthyroid patients, doses within the range of daily hormonal requirements are ineffective for weight reduction. Larger doses may produce serious or even life-threatening manifestations of toxicity, particularly when given in association with sympathomimetic amines such as those used for anorectic effects.

PRECAUTIONS:

Caution must be exercised in the administration of this drug to patients with cardiovascular disease. Development of chest pains or other aggravation of the cardiovascular disease requires a reduction of dosage.

Patients on thyroid preparations and parents of children on thyroid therapy should be informed that replacement therapy is to be taken essentially for life. They should immediately report during the course of therapy any signs or symptoms of thyroid hormone toxicity, e.g., chest pains, increased pulse rate, palpitations, excessive sweating, heat intolerance, nervousness, or any other unusual event. In case of concomitant diabetes mellitus, the daily dosage of antidiabetic medication may need readjustment. In case of concomitant oral anticoagulant therapy, the prothrombin time should be measured frequently to determine if the dosage of oral anticoagulants is to be readjusted.

Partial loss of hair may be experienced by children in the first few months of thyroid therapy, but this is usually a transient phenomenon and later recovery is usually the rule.

Drug Interactions — In patients with diabetes mellitus, addition of thyroid hormone therapy may cause an increase in the required dosage of insulin or oral hypoglycemic agents.

Patients stabilized on oral anticoagulants who are found to require thyroid replacement therapy should be watched very closely when therapy is started.

Cholestyramine binds both T_4 and T_3 in the intestine, thus impairing absorption of these thyroid hormones. Four to five hours should elapse between administration of cholestyramine and thyroid hormones.

Estrogens tend to increase serum thyroxine-binding globulin (TBg). Patients without a functioning thyroid gland who are on thyroid replacement therapy may need to increase their thyroid dose if estrogens or estrogen-containing oral contraceptives are given.

Drug/Laboratory Test Interactions — The following drugs or moieties are known to interfere with laboratory tests performed on patients taking thyroid hormone: androgens, corticosteroids, estrogens, oral contraceptives containing estrogens, iodine-containing preparations, and the numerous preparations containing salicylates.

Carcinogenesis, Mutagenesis, And Impairment of Fertility — A reported apparent association between prolonged thyroid therapy and breast cancer has not been confirmed. No confirmatory long-term studies in animals have been performed to evaluate carcinogenic potential, mutagenicity, or impairment of fertility in either males or females.

Pregnancy-Category A — The clinical experience to date does not indicate any adverse effect on fetuses when thyroid hormones are administered to pregnant women.

Nursing Mothers — Minimal amounts of thyroid hormones are excreted in human milk. Thyroid is not associated with serious adverse reactions and does not have a known tumorigenic potential. However, caution should be exercised when thyroid is administered to a nursing woman.

Pediatric Use — The incidence of congenital hypothyroidism is relatively high. Routine determinations of serum (T_4) and/or TSH is strongly advised in neonates in view of the deleterious effects of thyroid deficiency on growth and development.

ADVERSE REACTIONS:

Adverse reactions are due to overdosage and are those of induced hyperthyroidism.

OVERDOSAGE — Excessive dosage of thyroid medication may result in symptoms of hyperthyroidism, which may not appear for one to three weeks after the dosage regimen is begun. The most common signs and symptoms of overdosage are weight loss, palpitation, nervousness, diarrhea or abdominal cramps, sweating, tachycardia, cardiac arrhythmias, angina pectoris, tremors, headache, insomnia, intolerance to heat and fever. If symptoms of overdosage appear, discontinue medication for several days and reinstitute treatment at a lower dosage level.

Complications as a result of the induced hypermetabolic state may include cardiac failure and death due to arrhythmia or failure.

Dosage should be reduced or therapy temporarily discontinued if signs and symptoms of overdosage appear.

Treatment of acute massive thyroid hormone overdosage is aimed at reducing gastrointestinal absorption of the drugs and counteracting central and peripheral effects, mainly those of increased sympathetic activity. Measures to control fever, hypoglycemia, or fluid loss should be instituted if needed.

DOSAGE FORMS AVAILABLE:

LEVOXINE (L-thyroxine) tablets are supplied as oval, color coded, potency marked tablets in 11 strengths: 12½ mcg (0.0125 mg) - maroon, 25 mcg (0.025 mg) - orange, 50 mcg (0.05 mg) - white, 75 mcg (0.075 mg) - purple, 100 mcg (0.1 mg) - yellow, 112 mcg (0.112 mg) - rose, 125 mcg (0.125 mg) - brown, 150 mcg (0.15 mg) - blue, 175 mcg (0.175 mg) - turquoise, 200 mcg (0.2 mg) - pink and 300 mcg (0.3 mg) - green, in bottles of 100 and 1000, and unit dose in cartons of 100 (10 strips of 10 tablets), 200 mcg and 500 mcg injectable (see injectable package insert).

PROFESSIONAL LIABILITY

CONFIDENTIALITY OF PEER REVIEW

A recent decision in the Superior Court, Ocean County, holds a great deal of significance for the hospital peer review process. In Bundy versus Mirescu, MD, et al., Docket No. L-6787-1-88 (Law Div. 1990), the Court held that evaluations, opinions, and criticisms of peer review committees are not subject to discovery in medical malpractice cases.

Information and data gathered by utilization review committees in hospitals are absolutely privileged by statute, N.J.S.A. 2A:84A-22.8. However, information developed by other hospital committees are not protected by statute (Young versus King, 135 N.J. Super. 127, Law Div. 1975). Six years ago our courts began to develop the common law privilege of self-critical analysis, that holds there should not be disclosure of confidential critical, evaluative, or deliberative material if the public interest in confidentiality outweighs an individual's need to obtain the information, Wiley versus Mills, 195 N.J. Super. 332 (Law Div. 1984). In the Bundy case, the court applied the privilege of self-critical analysis to the peer review process. The court stated: "The peer review process, born of a regulatory requirement, is not motivated by a purely altruistic desire to improve health care. However, the purpose of the process is self-evaluation and health care improvement. This court, therefore, must characterize the peer review process as a self-critical process. The public benefits from a peer review committee that is free to express its opinions, evaluations, and criticisms. These statements provide the basis for change and improvement. To reveal such material would inhibit candor and stifle improvement. The opinions, criticisms, and evaluations contained within the peer review file come within the self-evaluation privilege and are absolutely protected."

This decision of a law division judge in Ocean County is not, of course, binding on other trial courts. Nonetheless, the Bundy opinion is significant for hospitals and medical staffs who wish to maintain the confidentiality of their peer review proceedings. Henceforth, there will be a case to rely upon to resist the discovery of evaluative material developed by peer review committees in hospitals when such information is sought by parties, particularly malpractice plaintiffs, in court proceedings. While certain factual information developed by such committees may be discoverable under the Bundy opinion, particularly where the information is not already in the possession of the plaintiff and he has no other means to obtain it, the opinion adds significant protection to the peer review process. (Joseph M. Gorrell, Brach, Eichler, Rosenberg, Silver, Bernstein, Hammer & Gladstone, Roseland)

NO RETRIAL OF PHYSICIAN FOR ALLEGED UNLAWFUL ABORTION

A trial court's judgment that evidence was insufficient to find a physician guilty of an attempted unlawful abortion constituted an acquittal and thus precluded a retrial, the Indiana Supreme Court ruled.

The physician was indicted for performing an abortion in violation of the requirement that it be performed in a hospital. He entered a plea of not guilty, and a trial began on February 4, 1980. The trial court granted the physician's motion for judgment on the evidence that the patient did not abort. The case went to the jury on the included offense of attempted performance of an unlawful abortion. The jury was deadlocked after seven hours, and the court declared a mistrial. The state filed a motion to correct errors, and the court denied it.

On appeal, the Indiana Supreme Court reversed the decision. The trial court erred in granting judgment for the physician because he had committed substantial steps towards performing an abortion, the court said. The patient, who was five-and-one-half to six months pregnant, went to a clinic for an abortion. She paid for the procedure and signed a consent for an abortion. The physician examined her, told her he could not perform a suction curettage, and said something else would have to be done. The patient returned a week later for the procedure. The physician inserted dilators into her cervix and gave her four or five injections in her stomach. She was given prescriptions for antibiotics and two other drugs, one to dry up her milk and the other to contract her uterus the next day if she had not gone into labor. The night after the procedure the patient became ill and was admitted to a hospital. She was incoherent and so ill that in the opinion of the obstetrician she would die if nothing were done. The obstetrician performed a caesarean section and delivered a live baby boy, who died two hours later.

The Indiana Supreme Court said that the state had presented some evidence on each of the three elements it had to prove for a conviction: that the physician knew the patient was beyond her first trimester; that he performed a substantial step towards an abortion; and that the procedure was not conducted in a hospital. The trial court should not have granted the physician's motion, the Indiana Supreme Court said in reversing the trial court's decision. The physician then appealed to the U.S. Supreme Court and certiorari was denied.

In 1987, after many delays, a trial court dismissed the charge against the physician on the basis of changes in the law governing double jeopardy that had occurred since the Indiana Supreme Court's 1981 reversal of the first trial court's decision. The state then appealed, asserting that the Indiana Supreme Court's 1981 ruling was the law of the case.

On appeal, the Indiana Supreme Court upheld the second trial court's discharge of the physician. Following the lead of the U.S. Supreme Court in a 1986 case, the Indiana Supreme Court had held in a 1987 case that the grant of a judgment by a trial judge is tantamount to an acquittal that bars retrial. The judgment in the physician's original trial for attempted abortion, following a mistrial, was based on the court's finding that there was insufficient credible evidence for a conclusion of guilt. A second trial on the same charge was precluded because to retry the physician would violate the constitutional prohibition against double jeopardy for the same offense, the court said. For purposes of the double jeopardy clause, a judgment that the evidence is legally insufficient to sustain a guilty verdict constitutes an acquittal even if the order was not designated an acquittal and was erroneous.

The court also disagreed with the state's contention that under the law-of-the-case doctrine, an appellate court's determination of a legal issue is binding in subsequent appeals. According to the court, the doctrine is a discretionary rule of practice and not a uniform rule of law. To retry the physician on a charge of which he was acquitted eight years before from adherence to a discretionary rule of practice would be manifest injustice, the court concluded. (Reprinted with permission from *The Citation,* American Medical Association, Vol. 60, March 15, 1990)

EDITOR'S DESK

1990 UPDATES

Another year. Another convention. Another taking arms against a sea of troubles. All to the beat of the slot machines at Sands by the sea.

Many of the problems noted during the 1989 Annual Meeting continue, although the battlelines were somewhat attenuated and the fighting similarly diminished. Nevertheless, your attention is directed to a careful reading of the 1990 Transactions, beginning on page 674, including the following:

1. Changes in emeritus status and in the dues structure.
2. Requests that approaches to HIV be updated, that HIV infections be treated as other communicable diseases, and that hospital testing be done on all patients when medically indicated.
3. Requests that reviewing organizations utilize physicians licensed in New Jersey and that physicians be allowed to perform office laboratory tests on a more reasonable basis.
4. Requests that Medicare policy be changed—that our physicians not have the onus of billing for patients nor the onus of the present carrier, who abolished its tollfree line.
5. Maintenance of our longstanding policy against the need for physician assistants in New Jersey.
6. Request for MSNJ representation on the Governor's Commission on Health Care Costs, due to report in October—and which request, as usual, has been ignored.

Plus officer and committee reports, tort reform, etc. One additional note—too many delegations showed vacancies in their roster of delegates and alternates. Is it again time to consider reapportioning the House of Delegates?

And next year—Agra on the Atlantic.

AMA HONORS

Kudos to our own, whose talents and previous honors are so well known to us, who among many other distinctions, both chaired the Board of Trustees of the Medical Society of New Jersey and received the Edward J. Ill Distinguished Physician Award from the Academy of Medicine of New Jersey:

- Palma E. Formica, MD, newly elected trustee of the American Medical Association, whose election was long overdue.
- James S. Todd, MD, the new executive vice-president of the American Medical Association, whose selection enhances the prestige of both the AMA and its Board.

It has been my privilege to work with these two outstanding physicians over many years and, more significantly, to be their friend. Long may it continue. ☐

GUEST EDITORIAL

As part of our new initiatives to prepare future physicians to address the revolutionary changes taking place in the United States health care delivery system, University of Medicine and Dentistry of New Jersey-

Robert Wood Johnson Medical School has established clinical prevention as the overall theme that guides our medical educational efforts. The initiative supports a medical school curriculum that continues to develop with its current organization and content, but with one major addition—a new mindset of faculty and students directed toward clinical prevention in all aspects of the physician-patient encounter. In addition, the clinical prevention initiative is designed to have a positive impact on the preventive aspects of the care provided by physicians currently practicing in New Jersey.

Extension of the clinical prevention concept to impact on practice patterns of New Jersey is occurring first as a result of departmental interactions with physicians and other preceptors at sites where students are placed for clerkships and residencies. Another opportunity to share preventive strategies is at conferences, such as the "Interdisciplinary Symposium on Prevention and Control of Lyme Disease," that drew nearly 500 participants to the medical school primarily from the tri-state area. Highlights of the major papers at this symposium were included in the July issue of *NEW JERSEY MEDICINE.*

A new section of the journal will be dedicated to articles authored by UMDNJ-Robert Wood Johnson Medical School faculty members regarding clinical prevention strategies. The special section will be entitled, "Clinical Prevention Grand Rounds," and will address the preventive aspects of such topics as diet, exercise, and hypercholesterolemia, traveller's diarrhea, and human papilloma viruses and cervical neoplasia. This is an exciting new venture between UMDNJ-Robert Wood Johnson Medical School and *NEW JERSEY MEDICINE* and affirms our joint commitment to provide practicing physicians with the latest techniques to prevent as well as to treat disease. ☐ Norman H. Edelman, MD, Dean, UMDNJ-Robert Wood Johnson Medical School

BOOK REVIEWS

ALLERGIC DISEASES FROM INFANCY TO ADULTHOOD

C. Warren Bierman and David S. Pearlman. Philadelphia, PA, W.B. Saunders, 1988. This textbook is dedicated to specific areas of immunological diseases that are among the most rapidly developing areas in the study of medicine. The increasing rate of mortality associated with asthma reflects the importance of understanding atopic disorders, i.e. that asthma is mediated by inflammatory mediators released with the activation of mast cells. It has become apparent that immunology, in general, is becoming a component of almost all fields of medicine, cutting across many disciplines and various age groups ranging from the pediatric to the adult and geriatric populations. Specifically, allergy in the field of clinical medicine involves the general integration of several disciplines and requires intricate weaving of immunology, pathology, physiology, pharmacology, and pulmonology. This text focuses on the immunological process known as allergy, which involves the IgE antibody; the authors utilize the term "atopy" in terms of the constellation of complexes of symptoms and signs that exhibit similar features, e.g. a familial (possibly hereditary) basis of a hypersensitivity to mediators of inflammation and a process that precipitates or aggravates the triggering of this mechanism(s), but not necessarily with IgE antibody. These triggers may include other processes that can directly activate the mast cell (the 'allergy' type cell), e.g. by complement activation, drugs (opiates), and neuropeptides.

Therefore, the book in its presentation and orientation, provides an appropriate clinical background for the generalist interested in the evaluation of a disease process that commonly involves over 40 million individuals in the United States. ☐ Leonard Bielory, MD

GERIATRIC MEDICINE FOR THE HOUSE OFFICER

Kim Goldenberg, MD, and Alice Faryna, MD. Williams & Wilkins, Baltimore, MD, 1990. This soft-covered book is one of a house officer series published in 1990. It was written "to provide residents with a fundamental knowledge of clinical geriatrics and to introduce them to the essentials of an interdisciplinary approach." It does this clearly.

The textbook essentially is a synopsis of geriatrics, useful to the private physician as well as the house officer, to start thinking about this subspecialty-with-a-difference within internal medicine. This perspective is in five major areas: general; organ system diseases; neuromuscular and related problems; psychosocial; and interdisciplinary (legal, ethics, and placement). Competence, Alzheimer's disease, and do not resuscitate orders all are mentioned and are all major issues.

Regardless of general experience, the reader is sure to benefit from the textbook and many tables in this subspecialty primer. It is less detailed than Merck's *Manual of Geriatrics,* which could follow easily. Examine both to match your needs. ☐ Morris Soled, MD

NEUROSCIENCE: THE BASICS

Brian A. Curtis, PhD. Lea & Febiger, Philadelphia, PA, 1990. The authors have written this text for students in nursing, occupational therapy, and physical therapy. Contents include sections dealing with the basic anatomy and physiology of nerve and muscle, spinal cord, brain stem and cerebellum, and cerebrum. Also, there are chapters on movement, language, and neurochemistry and neuroimaging.

There is a fair amount of basic neurophysiology and neurochemistry described in reasonable detail. Illustrations are quite good and well reproduced for a paperback volume. From time to time, brief references are made to disease entities and case histories appear in the midst of basic text material for illustrative purposes. These also are given at the end of chapters, where self-test questions usually are provided. Unfortunately, answers are not given for the test questions and case studies. Nevertheless, the questions do provide students with a basis to test their comprehension of each chapter.

This compact book packs a great deal of information into a small package for students. It is presented in a simple, straightforward, and easy-to-read fashion, and nevertheless is fairly complete. References also are provided. The book can be recommended for students in the allied health fields and also should be of interest to most medical students. ☐ Stanley C. Leonberg, Jr, MD

OCULAR TOXICOLOGY

S. Lerman and R.C. Tripathi. New York, New York, Marcel Dekker, Inc., 1990. This textbook represents the proceedings of the first ocular toxicology meeting held in Toronto, Canada, in 1988.

The text is organized by chapters devoted to each of the compartments of the eye, i.e. anterior chamber, cornea, retina. The chapters are the actual manuscripts submitted for presentation, and reflect basic research in these areas. Practical clinical use is limited since many of the manuscripts describe techniques to evaluate the toxic effects of a variety of agents, e.g. cytotoxic agents, preservatives, or antibiotics. The text could be a useful adjunct to anyone interested in basic ocular research in corneal transplants or the topical application of drugs to the eye. ☐ Leonard Bielory, MD

PRACTICE MADE PERFECT

Edna Kaplan. Boston, MA, Barrington Press, 1990. This is a 261-page, hardcover book of physician-patient relations, interpersonal communication, medical practice, and marketing medical care. It was written by a public relations practitioner with over 20 years of experience in the medical field.

This book is useful to the new practitioner who has no prior experience in business; the text gives a first panorama of today's changing outlook on medicine as a business to be promoted. The seasoned doctor will have absorbed much of this information by personal experience, but there are prepared forms and sample brochures useful to those in mid-career.

The five-part book includes: the new reality, including "A Drop in Esteem," "Adapting to a More Hostile Environment," and "Need for Action," which is to hire marketing consultants, find market niches, and reshaping unrewarding careers; conservation communications strategies (self, staff, and practice assessment, and a six-page patient questionnaire that touches on the physician's manner, fees, bills, delinquent accounts, answering service and coverage, and evaluation by the patient); an aggressive communication strategy including marketing public relations, advertising and do-it-yourself ideas, media attention, hiring a consultant, and reshaping an unrewarding career; aggressive communication including paid promotions and advertising; and a summary guide.

Show this book to your library committee; it is useful as a medical economics book, but not the only one. ☐ Morris Soled, MD

LETTERS & VIEWPOINTS

PHYSICIANS AND PATIENTS

Should a physician take care of his relatives or friends? Draw your own conclusions from these three real-life situations.

A surgeon colleague is sought after by an elderly relative who needs major surgery. What happens if the physician fails to cure? He is brought to a new word in physician-patient relations—enmeshment. This word is not the same as gratitude. It is the state of being involved without clearly defined rules. In this two-way coin toss, there is risk of "heads-I-win, tails-you-lose." Let's hope he comes out peacefully.

A friend and business associate of many years went to a physician in Manhattan when he was well and then called me to make a house call when he was sick in Jersey City. I asked him to get the laboratory reports from the doctor in New York but he never did. So, should I take a large risk in treating the patient without knowing his last laboratory work or x-ray reports? A few weeks later his alarmed wife called; his symptoms at night suggested a surgical condition, and I advised her to call the doctor in New York. It ended with a serious operation in New York. Suppose I had taken care of him and a bad result followed, what would he have said? Avoid a situation without continuity of care. Continuity of care is one of the cornerstones of modern geriatric practice, and its importance, including medicolegal implications, cannot be overstated. The patient who goes to a New York doctor and only wants a house call doctor here, as if he were a second class of practitioner, is so unrealistic that, in my experience, such a relationship will end up without appreciation for your efforts or the respect needed to function against odds. Avoid "two-tier medicine"—with you on the lower tier! The Park Avenue patient will not give you much satisfaction, in my 32 years of house call experience, and you can best hope only to come out even.

A third category is that of a longtime friend who seeks to become attached as a patient, although not treated for over 10 years. Now, being about 50 years of age, he is looking for a steady doctor, and does not want to let go of his old friend. There is no amount of reasoning to show him that medical practice must be objective, and good doctors do not always win. It is necessary to have patients who can become displeased and leave to go to someone else if they wish. The very dependent friend does not want to see anything but his immediate need for a checkup, even though you can see much further. Better to lose a friend now than risk an enemy later. Of course, he was a "sore loser," but the truth does not change for dependent people who know you a long time—medical care is best given by strangers. A good referral by you as a friend is worth a great deal, if you can make such a friend appreciate it.

There is a Greek papyrus of the second century bearing these words—"Jesus saith, a prophet is not received in his own country, nor doth a physician heal his neighbors." ☐ Morris Soled, MD

SBME DISCIPLINE

Scanning the disciplinary columns of the State Board of Medical Examiners newsletter in previous years, I could feel sorry for those listed. But it was not until I saw my namesake (Morton S. Goldstein, License #23157) on the list that I really became aware of what it felt like to join this pitiful group. Now I feel the pain of acrimonious public humiliation.

It is unfair and unjust to punish impaired physicians with notoriety much in the same way that it would be cruel to humiliate any other group of sick, infirmed, crippled, or debilitated individuals. Publicizing the names of our alcoholics and drug abusers could be seen as an attempt to intimidate those of us who are functionally healthy while certainly driving those of us with problems into the closet. How can the Medical Society of New Jersey Physicians' Health Program hope to find and treat sick doctors in such an environment?

Rather than just seeking a clarification to point out that Morton S. Goldstein, MD, is not Morton H. Goldstein, MD, I should like to see this incident spark a positive turn in SBME public policy; for it seems to me that the medical examiners could protect the public by leasing and lifting of licenses, without the harsh publicity! I hope my colleagues will be stirred to similar response. ☐ Morton H. Goldstein, MD

CHARITY WORK BY HOSPITAL PHYSICIANS

In enumerating some charities performed by doctors, Doctor Costabile, in his inaugural address (87:471-472, 1990), omitted the most important of all: charities performed by doctors connected with hospitals. Doctors run their medical staffs; that imposes upon them the obligation of membership on all committees mandated by inspecting authorities. Thus, the average staff member may find himself spending about 60 hours a year at meetings to help run the hospital. The average locum tenens pays about $30 to $40 an hour. Thus, at $35 per hour, doctors contribute about $2,100 each in free time. Multiply this by even so paltry a figure as 5,000 doctors, and in New Jersey alone, the medical contribution to hospital affairs, at the very least, is about $10 million. For some reason, hospitals do not factor this into their costs when measuring reimbursement. Why not? They charge for everything else. And if they do not, they should at the very least exhibit a large placard at the hospital door or perhaps near the brass donor lists, enumerating the real-time contribution of doctors to the hospital. Hospitals should advertise in newspapers this contribution by doctors. And if hospitals refuse, then the Medical Society should beef up its anemic advertising with this piece of information. ☐ Charles Harris, MD

LETTERS TO THE EDITOR

Letters to the editor-in-chief of *NEW JERSEY MEDICINE* are welcome. Communications should be sent to *NEW JERSEY MEDICINE*, the Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648.

Tracheal Stenosis

JEAN-PHILIPPE BOCAGE, MD
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A case report of tracheal stenosis is used to review the pathophysiology and surgical management of symptomatic tracheal stenosis following intubation and/or tracheostomy. The authors discuss tracheal resection and reconstruction, the preferred permanent method of managing benign tracheal stenosis.

Cicatricial response to erosive changes in the tracheal wall from intubation and tracheostomy can produce a variety of lesions, resulting in the need for tracheal resection and reconstruction. In 1971, Andrews and Pearson reported an 18 percent incidence of functional stenosis in patients managed by tracheostomy and assisted ventilation.[1] Although low-pressure and high-compliance cuffs, introduced by Grillo and Cooper have dramatically decreased the incidence of cuff stenosis, such devices can produce tracheal injury if overinflated.[2] Other causes of stenosis include sclerosing mediastinitis, postinflammatory changes following diphtheria, and, rarely, tuberculosis, amyloidosis, and congenital stenosis.[3,4]

We illustrate our tracheal stenosis experience with a case history from Robert Wood Johnson University Hospital.

CASE HISTORY

A 51-year-old male was admitted to an affiliated medical center following a motor vehicle accident. He had a depressed frontal skull fracture with acute subdural hematoma and distal lower extremity closed fractures. Following emergency craniotomy, the patient developed prolonged ventilator dependency, with tracheostomy performed after three weeks of endotracheal intubation with a #8 Shiley® (low pressure, cuffed) tracheostomy tube.

The patient eventually was weaned from the ventilator, and the tracheostomy tube was removed four weeks after insertion. Two weeks after tracheostomy removal, the patient developed dyspnea and expiratory wheezing. Fiberoptic laryngoscopy revealed tracheal narrowing 2 cm below the vocal cords with normal glottis and subglottic larynx. The patient was transferred to our institution for evaluation and treatment.

At the time of transfer, the patient was awake, alert, and communicative. He had mild dyspnea and a loud expiratory stridor. Arterial blood gases revealed pH of 7.41, pAO_2 of 81, and pCO_2 of 40.

Drs. Bocage, Caccavale, Lewis, Sisler, and MacKenzie are affiliated with the Department of Surgery, UMDNJ-New Jersey Medical School, New Brunswick. Requests for reprints may be addressed to Dr. Caccavale, 185 Livingston Avenue, New Brunswick, NJ 08901.

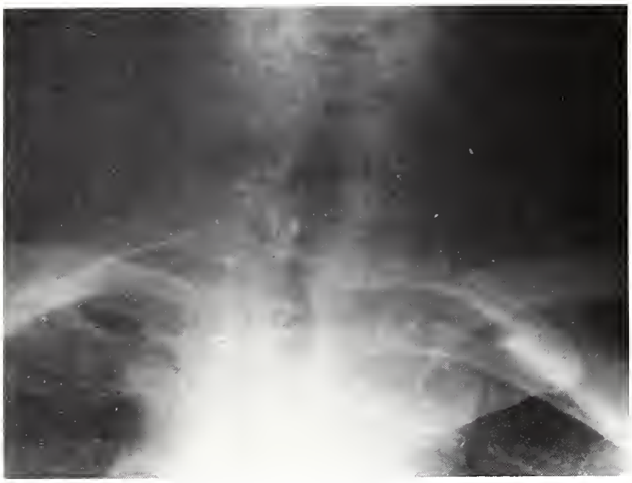

Figure 1. Narrowing of the trachea below the larynx, about 3 cm long and approximately 8 mm wide.

Cervical soft tissue films and computed axial tomography scan demonstrated tracheal narrowing beginning 2 cm below the vocal cords and extending for 2 cm (Figure 1). The patient was treated with humidified inspired air and scheduled for tracheal resection. Four hours prior to surgery, the patient developed acute respiratory distress and worsening stridor. Then, the patient was taken to the hospital operating room and anesthetized by mask with halothane and O_2.

A #3 (6.6 mm) Hollinger® ventilating bronchoscope was passed through the severely stenotic area. The stricture then was dilated with successively larger rigid scopes until a #7 (10.7 mm) Hollinger® scope could be passed. Careful bronchoscopic examination of the distal trachea revealed normal findings. Endotracheal intubation then was achieved with a #6 Hollinger® tube.

The trachea was exposed through the old tracheostomy scar and the lesion identified. The operative findings correlated with radiologic findings. The stricture had formed in the area of the previous tracheostomy stoma. The lesion was dissected circumferentially with division of the trachea below the stenotic area.

The distal trachea was intubated with a new sterile endotracheal tube and connected to the anesthesia machine with sterile corrugated tubing across the operative field. The first endotracheal tube was pulled back into the larynx, and 2.5 cm of stenotic tissue was excised. With the neck in extreme flexion, the trachea was approximated without tension, and anastomotic sutures (Vicryl®) were placed. The second anesthesia tube was removed and the orotracheal tube was advanced across the anastomosis. The sutures were tied with the knots on the outside and the suture line then was covered with a pedicle of strap muscles. The patient was extubated in the operating room. Flexion of the neck was maintained by suturing the chin to the chest. His postoperative course was unremarkable. Examination of pathologic specimens revealed subepithelial fibrosis. Seventeen days after surgery, the patient was transferred to a rehabilitation center for post-traumatic care.

The patient developed recurrent stridor several months after discharge. Evaluation by an otolaryngologist revealed granulation tissue 5 cm below the vocal chords. The area of the anastomosis below the cricoid was widely patent. The patient was managed with several endoscopic laser treatments. At the present, the patient is asymptomatic and doing well.

DISCUSSION

Post-tracheostomy lesions occur mainly at two places: the stoma (tracheal opening) and the site of the balloon cuff (Figure 2.) At the stomal level, anterolateral stenosis is seen. At the cuff level, circumferential stenosis occurs at a position lower than seen with a tracheostomy tube. The segment between often is inflamed and malacic. As illustrated by our patient, a combination of these two lesions occurs in a small percentage of patients.[4] In 1970, Lindholm showed that, as early as 48 hours after intubation, endotracheal tubes may cause a variety of abnormalities such as glottic edema, vocal cord granulation, erosion over the arytenoids, and laryngeal or subglottic stenosis.[5]

Pathogenesis of tracheal stenosis has been studied extensively.[1, 6] The fundamental lesion begins with inflammation, followed by mucosal ulceration leading to necrosis and absorption of underlying cartilage. Reparative healing leads to scar formation. Lesions at the tracheostomy site involve the anterior and lateral walls, forming a triangular area of narrowing.[7] Inflammatory changes can be seen within 24 to 48 hours. Andrews and Pearson noted that circumferential ulceration secondary to pressure necrosis at the cuff level is a precursor of stenosis. Other etiologies include hypotension during mechanical ventilation, tracheal infection, and the irritative quality of tubing material.[1]

SIGNS AND SYMPTOMS

The trachea, approximately 10 to 12 cm long and 1.5 to 2.2 cm wide, begins at the inferior border of the cricoid cartilage and extends to the level of the carina. Adjacent structures are the thyroid gland, which adheres to the second and third tracheal rings, and the recurrent laryngeal nerves in the tracheoesophageal groove. Awareness of the complications following tracheostomy can help diagnose tracheal stenosis. This especially is true of mild to moderate stenosis, that may be misdiagnosed as asthma. Dyspnea on exertion has been reported to be an invariable component that may be overlooked in a patient with known obstructive pulmonary disease. Although usually absent, stridor can be apparent when the tracheal lumen is less than 5 mm. The patient also may complain of increased difficulty in bringing up sputum. Brassy cough is a common finding in patients with a functional stenosis.[8] According to Grillo, symptoms of upper respiratory obstruction usually appear within two months after extubation, but can be delayed up to two years. Grillo recommends assessment for tracheal stenosis in any patient with symptoms of airway obstruction who has been intubated for longer than 48 hours within the previous two years.[4] Previously published data report a 17 to 20 percent incidence of post-tracheostomy stenosis but more recent data is not available to our knowledge.[1,7] Not all patients develop stenosis following intubation. Only symptomatic patients should be evaluated for possible tracheal stenosis. When the lumen of the trachea is reduced by 30 to 40 percent, most patients become symptomatic and respiratory distress develops when greater then 80 percent of the airway is compromised.

DIAGNOSTIC STUDIES

Normal lung fields usually appear on the chest radiograph. Lateral neck films are useful in detecting most lesions of the upper trachea. Fluoroscopy helps to demonstrate malacia and vocal cord function. Tomograms give precise measurement of the distance of the lesion from landmarks such as the cords and the carina. Finally, CAT scan, though of limited value in the evaluation of benign stenosis, helps determine extent of neoplastic invasion. The larynx must be evaluated properly preoperatively, as there may be associated stenotic lesions at the glottic and subglottic levels. If the laryngeal airway is considerably impaired, the patient will not benefit from tracheal repair alone, and repair of the laryngeal lesions becomes mandatory prior to tracheal reconstruction.[7] Bronchoscopy is required but should be reserved until a definitive treatment plan has been made. Bronchoscopy allows a visual assessment of the stricture, including its pliability and the presence of inflammation and/or ulceration. Rigid bronchoscopy with pediatric scopes, under general anesthesia, can be used to dilate severe stenosis for emergency relief and control of airway before operative repair.[3]

MANAGEMENT

The preferred permanent method of managing benign stenosis is tracheal resection and reconstruction. Temporary methods include serial dilatation, stenting using Montgomery® T-tubes, reinsertion of tracheostomies, systemic administration of steroids, and repeated tissue destruction with forceps or lasers. A knowledge of tracheal anatomy and adherence to the principles of anesthesia and tracheal surgery are necessary. Strictures involving up to half the tracheal length can be resected and anastomosed in more than 90 percent of patients. Nevertheless, this method is contraindicated in the following patients: when medical conditions are judged too poor to tolerate an operation and when predictable exacerbation of respiratory problems would require prolonged and repeated intubation and/or tracheostomy, such as in myasthenia gravis, or in quadriplegia in which secretions cannot be controlled.

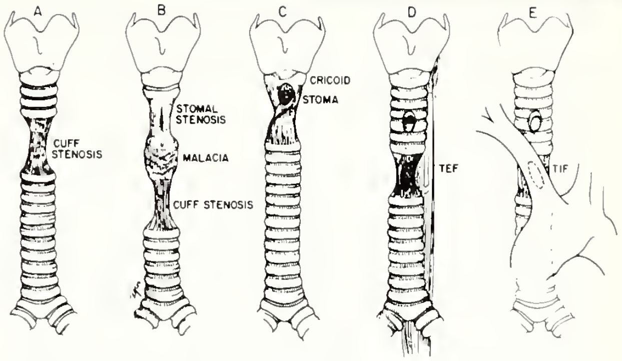

Figure 2. Diagram of principal postintubation lesions. **A,** Lesion at cuff site in a patient who has been treated with an endotracheal tube alone. The lesion is high in the trachea and is circumferential. **B,** Lesions that occur with tracheostomy tubes. At the stomal level, anterolateral stenosis is seen. At the cuff level, lower than with an endotracheal tube, circumferential cuff stenosis occurs. The segment between often is inflamed and malacic. **C,** Damage to the subglottic larynx. A high tracheostomy or one that erodes back by virtue of the patient's anatomy may damage the inferior cricoid and produce a low subglottic stenosis as well as an upper tracheal injury. **D,** Tracheoesophageal fistula (TEF). The level of fistulization usually is where the cuff has eroded posteriorly. Occasionally, angulation of the tip of the tube may produce erosion from the tip. There also is usually severe circumferential damage at this level by the cuff. **E,** Tracheoinnominate fistula (TIF). A high-pressure cuff frequently rests on the trachea directly behind the innominate artery. Erosion may occur, although rarely. The more common innominate artery injury is from a low tracheostomy where the inner portion of the curve of the tube rests in proximity to the artery and causes direct erosion. (Reprinted by permission. Grillo HC, *J Thorac Cardiovasc Surg* 78:860-875, 1979.)

The history and details of operative technique for management of stenosis have been discussed.[9-11] Of crucial importance is the anesthesia of the stenotic airway; deep halothane inhalation with oxygen allows maintenance of spontaneous ventilation intraoperatively and allows more time for control of the airway than is possible with an apneic patient.[12] Surgical resection for postintubation stenosis rarely is an emergency, except in patients with stenosis immediately above the carina, where intubation is difficult to maintain, and in patients with hemmorhage secondary to tracheal-innominate fistula. In almost all cases, as in our patient, it is possible to perform endoscopic dilatation of the lesion and, if necessary, intubate across the lesion temporarily.[13]

Through a cervical exposure, up to 7 cm of the tracheal length has been resected successfully. Removing an insufficient amount of diseased trachea may lead to recurrence of stenosis, but, ideally, at least half of the ring below the cricoid should be saved. The trachea then can sutured to the cricoid. There must be good cartilaginous tissue and as little inflammation as possible, but if the stenosis extends to the subglottic larynx, the anterior larynx can be resected in a sloping fashion to the inferoposterior margin of the thyroid cartilage in an attempt to preserve the usually nondiseased posterior cricoid plate and its intimately related recurrent laryngeal nerves.[9, 11] The trachea distal to the stricture usually is normal, and care must be taken to avoid devascularization during manipulation.

In 1986, Grillo reported 279 patients with postintubation stenosis who underwent reconstruction and primary anastomosis.[13] The results were classified as good (83 percent), satisfactory (9 percent), and failure (4 percent) with a 1.8 percent mortality. Complications were attributed to failure of diagnosis or failure of technique. Failure of diagnosis included failure to recognize an incompetent glottis before resection, necessitating postresection intubation and/or tracheostomy. Failure of technique included excessive granulation (28 patients), separation (4 patients), stenosis (15 patients), and cord dysfunction (4 patients). No granulation at the suture line occurred in 113 patients whose anastomoses were done with absorbable sutures (Vicryl®). Separation and/or recurrent stenosis can be avoided by careful attention to surgical technique to achieve a tension-free anastomosis. Tension can be avoided by using cervical flexion in all cases (chin to chest) and, when necessary, sectioning the suprahyoid musculature (laryngeal release), as described by Montgomery,[14] or releasing the pulmonary hilum to obtain additional length. Acute separation can be resutured if it occurs early and necrosis has not yet taken place. Delayed stenosis can be managed by dilatation and/or stenting with a Montgomery® T-tube followed by resection in four to six months to allow resolution of inflammation.

Tracheal lesions also can be managed using the Nd:YAG laser through the rigid bronchoscope and under general anesthesia as reported in the otolaryngology literature. Immediate results usually are good following laser therapy but genuine tracheal stenosis tends to recur following laser therapy.[15] As reported by Cavaliere, 81 patients treated for tracheal stenosis with the laser endoscopically required 132 treatments, a stable result was achieved in only 34 patients. Twenty patients required resection for recurrence.

CONCLUSION

Significant advances in tracheal surgery have resulted in a better understanding of tracheal pathology and improvements in surgical and anesthetic techniques. Understanding the complications of intubation and/or tracheostomy facilitates the diagnosis of tracheal stenosis. In over 90 percent of patients, symptomatic tracheal stenosis can be managed successfully by resection and primary anastomosis. ■

REFERENCES

1. Andrews MJ, Pearson FG: Incidence and pathogenesis of tracheal injury following cuffed tube tracheostomy with assisted ventilation: An analysis of two years' prospective study. *Ann Surg* 173:249-263, 1971.

2. Grillo HC, Cooper JD, Geffin B, et al.: A low-pressure cuff for tracheostomy tube to minimize tracheal injury. *J Thorac Cardiovasc Surg* 62:898-907, 1971.

3. Grillo HC: The trachea—tumors, strictures, and tracheal collapse, in Glenn W, *Thoracic and Cardiovascular Surgery, 4th Edition.* Norwalk, CT, Appleton-Century-Crofts, pp. 308-325, 1983.

4. Grillo HC: Benign and malignant disease of the trachea, in Shields T, *General Thoracic Surgery. 3rd Edition.* Philadelphia, PA, Lea & Febiger, pp. 667-679, 1989.

5. Lindholm CE: Prolonged endotracheal intubation. *Acta Anaesth Scand* 33 (Suppl):1-30, 1970.

6. Cooper JD, Grillo HC: The evolution of tracheal injury due to ventilatory assistance through cuffed tubes: A pathological study. *Ann Surg* 169:334-338, 1969.

7. Weber AL, Grillo HC: Tracheal stenosis: An analysis of 151 cases. *Rad Clin NA* 16(2): 291-308, 1978.

8. Andrews MJ, Pearson FG: An analysis of 59 cases of tracheal stenosis following tracheostomy with cuffed tube and assisted ventilation with special reference to diagnosis and treatment. *Br J Surg* 60: 208-212, 1973.

9. Grillo HC: Surgical treatment of postintubation tracheal injuries. *J Thorac Cardiovasc Surg* 78:860-875, 1979.

10. Grillo HC: Notes on the windpipe. *Ann Thoracic Surg* 47:9-26, 1989.

11. Pearson FG, Cooper JD, Nelens JM, et al.: Primary tracheal anastomosis after resection of the cricoid cartilage with preservation of the recurrent laryngeal nerve. *J Thorac Cariovasc Surg* 70:806-816, 1975.

12. Mathisen DJ, Grillo HC: Endoscopic relief of malignant airway obstruction. *Ann Thorac Surg* 48:469-475, 1989.

13. Grillo HC, Zannini, P, Michelassi F: Complication of tracheal reconstruction. *J Thorac Cardiovasc Surg* 91:322-328, 1986.

14. Montgomery WW: Suprahyoid release for tracheal anastomosis. *Arch Otolaryngol* 99:255-260, 1974.

15. Cavaliere S, Foccoli P, Farina PL: Nd:YAG laser bronchoscopy. A five-year experience with 1,396 applications in 1,000 patients. *Chest* 94:15-21, 1988.

Kallmann's Syndrome: Reproductive Success

MICHAEL GOLDMAN, MD
ALBERT RIDDLE, MD
EUGENE MARKHAM, MD

Kallmann's syndrome is a genetic disorder that includes pituitary gonadotropin deficiency associated with sexual immaturity and infertility. A successful treatment program resulted in normalization of sexual development, spermatogenesis, and conception.

Kallmann's syndrome (KS) is a congenital disorder in which pituitary gonadotropins are absent. This defect is thought to be secondary to an idiopathic failure in gonadotropin-releasing hormone (GnRH) from the hypothalamus; it may be associated with other defects such as anosmia, cleft lip, or cleft palate.[1,2]

Treatment of KS is directed toward restoring normalization of gonadal steroid levels to allow sexual maturation and to induce fertility.

The authors present a patient with KS to illustrate a successful program of gonadal stimulation, utilizing exogenous gonadotropins that culminated in sexual maturation, normalization of testosterone levels, initiation and completion of spermatogenesis, and in a conception over a three-year period.

CASE REPORT

The patient was referred for an infertility examination. He first was evaluated in 1970, at 19 years of age. It was noted that the patient showed "poor development of his genitalia" as well as a low normal follicle-stimulating hormone (FSH) level. Bone age showed a 2-year maturation delay. Skull x-rays were normal. The patient received intramuscular testosterone injections for 4 years with subsequent

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From Englewood Hospital where Drs. Goldman and Riddle are affiliated with the Department of Medicine and Dr. Markham is affiliated with the Department of Obstetrics/Gynecology. The paper was submitted in November 1989 and accepted in March 1990. Requests for reprints may be addressed to Dr. Goldman, 600 Palisade Avenue, Englewood Cliffs, NJ 07632.

Table. **Testosterone levels and semen analyses.**

Date	Testosterone	Semen No.	Volume	Motility	Morphology	Testes Size	Comment
	N1 300-1000ng/dl	$\times 10^6$	(cc)	(%)	(% normal)	(cm)	
10/85	16					2 x 1	hCG begun
1/86	473	0	1.0	0	0		hMG begun
5/86	644	0	2.0	0	0	2½ x 1	
3/87	707	0	2.7	0	0	3 x 2	
7/87		1.6	3.0	26	5	3½ x 2	
12/87		11.5	4.3	50	50		
4/88	606	4.4	4.2	45	40	4 x 2	
12/88		13.0	4.5	20	15		
5/89		19.0	5	80	95	4½ x 2½	Good post-coital test
6/89		+Pregnancy test					
2/90		Delivered 7 pound, 11 ounce male					

"growth of axillary and pubic hair."

When seen in 1985, the patient had not received hormonal therapy for over ten years. Medical history, except for pneumonia, was unremarkable. The patient claimed to have erections with adequate sexual satisfaction; he noted scant ejaculate. The patient shaved infrequently and did not notice body hair growth since ending hormone injections. The patient was unable to smell any common substances such as tobacco, coffee, or peppermint, but could "sense" toxic fumes, such as ammonia in high concentrations.

Family history revealed no reproductive problems. Physical examination revealed an obese male, eunuchoid in habitus, and looking much younger than his 34 years of age. No facial defects were noted. Mild gynecomastia was present bilaterally. Testes were soft and each measured 2.1 cm. The glans was normal in appearance but short, measuring 7 cm when extended.

Laboratory data showed a normal T_4, T_3 resin, and chemistry screen. Bone age was of a fully matured male. Luteinizing hormone (LH) and FSH were 2.7 unit/L (normal $\leq$ 18) and 6.3 unit/L (normal 5-25), respectively. Testosterone levels and semen analyses are noted in the Table for our patient from October 1985, to February 1990.

Therapy was begun with human chorionic gonadotropin (hCG), 2,000 units intramuscularly, three times per week. After three months of therapy, and with normalization of testosterone levels, human menopausal gonadotropin (hMG) was

Abbreviations

KS:	Kallmann's syndrome
GnRH:	Gonadotropin-releasing hormone
FSH:	Follicle-stimulating hormone
LH:	Luteinizing hormone
hCG:	Human chorionic gonadotropin
hMG:	Human menopausal gonadotropin

started at one ampule, three times per week along with hCG.

The patient began to notice increasing hair growth, and began to shave daily. Sexual functioning improved dramatically. Muscular strength increased and his weight increased 25 pounds. His voice also deepened. The volume of the testes increased and the amount of ejaculate rose (Table). Unfortunately, the patient also noted greying of his hair and needed treatment for acne. A postcoital test, in May 1989, was good and one month later a conception in his partner was documented by a positive pregnancy test. Pergonal® was stopped.

Pregnancy was uncomplicated, and resulted in the vaginal delivery of a healthy 7 pound, 11 ounce male infant at 38 weeks.

DISCUSSION

KS, an uncommon disorder seen in less than 1 in 10,000 males,[3] has a constellation of symptoms, including delayed sexual maturation and infertility resulting from absent or diminished gonadotropins, as well as an absence or impaired sense of smell caused by a developmental defect in the olfactory tracts. Lowered gonadotropins result from absent or diminished GnRH. Studies have shown a continuum of this defect, explaining the presence of measurable levels of FSH and/or LH in some patients.[4] Structural olfactory abnormalities have been confirmed in vitro by autopsy studies and in vivo by magnetic resonance imaging, demonstrating hypoplasia or aplasia of the rhinencephalon.[4] Midline defects, including cleft lip and palate, also may be seen.

The proximity of the olfactory centers, with the hypothalamic tract responsible for GnRH, suggests a common unifying defect. Indeed, animal studies have shown that hypothalamic GnRH-producing neurons originate in the olfactory placode and that a defect in their migration from this area could account for this dual disorder.[6] Genetic analysis of the human gene encoding GnRH (located to the short arm of chromosome[8]) has failed to demonstrate deletions or major rearrangement as a common basis for KS.[7]

Genetic transmission of this disorder is uncertain, but probably is autosomally transmitted.

Treatment of KS is directed towards the desires and needs of the patient. Delayed maturation simply can be treated by testosterone or estrogen replacement. More physiologic is the use of exogenous GnRH or the pituitary hormones hMG and hCG. These hormones may stimulate gonadal function and, thereby, will produce both endogenous testosterone or estrogen and stimulate spermatogenesis or oogenesis necessary for infertile patients. Progressive increase in testicular volume, as demonstrated in our patient usually indicates successful treatment.[8] The olfactory defects remain permanent and untreatable.

In our patient, the finding is noteworthy that semen parameters never normalized despite successful sperm production and the ability to conceive. This is consistent with other studies with KS that show reproductive success with sperm numbers well below normal ranges.[9] It is uncertain why further increases in sperm production are not seen. ■

REFERENCES

1. Lieblich JM, Rogol AD, White BJ, Rosen SW: Syndrome of anosmia with hypogonadotropic hypogonadism (Kallmann's syndrome). *Am J Med* 73:506-519, 1982.

2. Kallmann F, Schoenfeld W, Barrera S: The genetic aspect of primary eunuchoidism. *Am J Ment Defic* 48:203-236, 1944.

3. Jones JR, Kemmann E: Olfacto-genital dysplasia in the female. *Obstet Gynecol Annu* 5:443, 1976.

4. Yeh J, Rebar R, Liu J, Yen S: Pituitary function in isolated gonadotropin deficiency. *Clin Endocrinol* 31:375, 1989.

5. Klingmuller D, Dewes W, Krahe T, et al.: Magnetic resonance imaging with anosmia and hypothalamic hypogonadism (Kallmann's syndrome). *J Clin Endocrinol Metab* 65:581, 1987.

6. Schwanzel-Fukuda M, Pfaff DW: Origin of luteinizing hormone-releasing hormone neurons. *Nature* 338:161-164, 1989.

7. Weiss J, Crowley W, Jameson J: Normal structure of the gonadotropin-releasing hormone (GnRH) gene in patients with GnRH deficiency and idiopathic hypogonadotropic hypogonadism. *J Clin Endocrinol Metab* 69:299, 1989.

8. Ley S, Leonard J: Male hypogonadotropic hypogonadism: Factors influencing response to human chorionic gonadotropin and human menopausal gonadotropin, including prior exogenous androgens. *J Clin Endocrinol Metab* 61:746, 1985.

9. Opperman D, Happ J, Mayr W: Stimulation of spermatogenesis and biological paternity by intranasal (low dose) gonadotropin-releasing hormone (GnRH) in a male with Kallmann's syndrome: Intraindividual comparison of GnRH and gonadotropins for stimulation of spermatogenesis. *J Clin Endocrinol Metab* 65:1060, 1987.

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Clinical Decision Making

Conference on Therapeutic and Diagnostic Options

HOWARD HOLTZ, MD
ROBERT RESTIFO, DO

A 66-year-old woman was diagnosed with small cell carcinoma of the lung. Different opinions on management led to critical appraisal of therapy literature and a treatment decision.

A 66-year-old woman was admitted to UMDNJ-University Hospital, Newark, for the management of a lung mass.

Robert Restifo, DO: The patient was well until three months earlier when she presented with complaints of fever, shortness of breath, and blood-streaked sputum. A right lower lobe pneumonia was diagnosed, and she was given a course of antibiotics. The patient improved symptomatically but a repeat chest x-ray one month later revealed persistence of the right lower lobe infiltrate. A computerized tomographic (CT) study of the chest was ordered and the patient was referred to the Division of Pulmonary Medicine. The study showed a right lower lobe mass extending to the pleura with no evidence of lymphadenopathy; fiberoptic bronchoscopy was scheduled.

The patient, a housekeeper, suffered from asthma since childhood; in her adult life, the asthma was easily controlled. She had uncomplicated pneumonia at age 63; a colon resection at age 36 for reasons that were unclear; and a hysterectomy at age 30 for recurrent uterine bleeding. There were no known allergies. She was being treated with an oral theophylline preparation and an inhaled beta-agonist. She smoked one pack of cigarettes per day for 36 years; however, she discontinued smoking 10 years prior to her current illness. There was no history of alcohol or drug use. Her mother had a history of hypertension and heart disease.

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The patient's temperature was 98°F; pulse was 80; and respirations were 18. Blood pressure was 120/74 mm Hg. On examination, the patient was alert and oriented; the skin was cool and dry, and the head was normal. The neck was supple, the carotid pulses were full, and no bruits were appreciated. No lymphadenopathy was found. Auscultation of the heart revealed a regular rhythm with a grade 2/6 systolic ejection murmur. Decreased breath sounds were noted at the right lung base. Examination of the abdomen revealed an intact and functioning colostomy without enlargement of the liver or spleen. There was no peripheral edema, clubbing, or cyanosis. Rectal examination was normal and stool gave a negative test for occult blood. Neurologic examination was normal.

Laboratory data revealed the following: white blood cell count, 3,100; hematocrit, 35.3 percent; platelet count, 429,000; prothrombin time and partial thromboplastin time, normal; urea nitrogen, 9 mg/dL; creatinine, 1.0 mg/dL; sodium, 139 mmol; potassium, 4.8 mmol; chloride, 104 mmol; carbon dioxide, 28 mmol; blood glucose, 140 mg/dL; serum calcium, 9.3 mg/dL; serum aspartate aminotransferase, 26 U; alkaline phosphatase, 81 U; and urinalysis, normal. An electrocardiogram revealed a normal sinus rhythm at a rate of 80. An x-ray film of the chest disclosed a large density in the right lower lobe without hilar or mediastinal enlargement.

Fiberoptic bronchoscopy revealed an endobronchial lesion obstructing the right lower lobe bronchus distal to the opening of the superior segment bronchus. Biopsy of the lesion was reported as small cell carcinoma (SCCL), intermediate cell type.

Repeat chest CT showed no interval change. A CT scan of the head and abdomen did not reveal metastatic disease. Bilateral bone marrow aspiration and biopsies were normal.

Howard Holtz, MD: This case was chosen because of the diametrically opposed consultative opinions on therapy for this patient with SCCL. The medical team and oncologists recommended chemotherapy and radiation; the thoracic surgeons suggested initial resection of the tumor followed by these therapies.

SCCL accounts for 15 percent of all lung cancers; 15 percent are "limited" on presentation and the median survival with therapy in those with limited disease is 15 months. Also, due to the extremely fast doubling time and efficient lymphatic and hematogenous dissemination of SCCL, its early micrometastasis renders the surgeon's knife impotent. While surgery is the only chance for cure in the non-small cell lung cancers, in small cell tumors it has taken a back seat to a temporary and toxic victory with antineoplastic agents and radiation. One need not apply the tumor-nodal metastasis (TNM) staging system to SCCL because of the inefficacy of surgery. Limited disease is tumor limited to one hemithorax including the ipsilateral scalene or supraclavicular nodes and extensive disease is anything else.[1] This simple staging system is sufficient to predict different response rates and prognoses, but clearly excludes any consideration of surgery.

The surgeon's recommendation in this case prompted an examination of evidence supporting the teaching of SCCL as a nonsurgical disease. Clinical suspicion of the futility of surgery for this disease began to evolve into certainty in 1969. That year, the Medical Research Council (MRC) of Great Britain published a comparative trial of surgery and radiation therapy.[2] The study randomized 144 patients with SCCL diagnosed preoperatively who were candidates for curative resections. Seventy-one patients were randomized to surgery and 73 patients were randomized to radiotherapy. The five-year survival was 1 percent in the surgical group and 4 percent in the radiotherapy group. In addition, 62 percent of the surgical group eventually required additional therapy (predominantly radiotherapy). The mean survival for surgical patients was 199 days versus 284 days in the radiotherapy group ($P=.05$). There were 5 patient deaths attributed to surgery and the postoperative surgical survival curve revealed more deaths in the early followup than the radiotherapy group. The ten-year followup of these patients revealed no survivors in the surgical group and 3 patients who were alive in the radiotherapy group.[3] The mean survival was 199 days and 300 days for the surgical and radiotherapy groups, respectively, now reaching statistical significance at $P=.04$. Using a methodologic hierarchy for therapy recommendations (Table), the level 1 MRC trial supports grade A advice not to operate.[4]

In addition to this randomized comparative trial, other evidence contributed to the demise of surgery in SCCL. In 1973, patients with SCCL who died within 30 days of operation for curative resection were studied.[5] At autopsy, 70 percent had residual disease, predominantly distant metastases. Finally, Mountain's series of over 2,000 lung cancer patients showed no long-term survivors with small cell histology;[6] data indicated that survival in SCCL had no correlation with anatomic extent of disease, and Mountain concluded that the biologic behavior of SCCL warranted automatic assignment of patients to the worst clinical stage. Thus, the use of the TNM staging of non-small cell lung cancers, primarily to determine resectability and the continued use of limited versus extensive staging in SCCL was started.

Why would some surgeons challenge the grade A recommendation not to operate on SCCL? The

Table. ***Grades of therapeutic recommendations.***

Grade A: Level I Evidence. The best quality of therapeutic evidence is the randomized controlled trial (RCT) with a low alpha (false positive) error in a trial that showed a positive therapeutic effect or a low beta (false negative) error in a negative trial. The extent of alpha error is easy to obtain; it is the same as the *P* value reported in the trial. For example, a randomized trial reveals drug A to be superior to placebo in decreasing mortality at a *P* value $< .001$. This positive therapeutic effect has a very small probability of being due to chance alone, less than 1 in a 1,000. A level I negative trial shows no therapeutic benefit and has a low probability of being a false negative result (beta error). A study with a low beta error is sometimes referred to as having high power: a high likelihood of detecting a therapeutic difference.

Grade B: Level II Evidence. These studies are RCTs with higher than typically accepted alpha or beta errors. Conventionally accepted errors are .05 alpha and .20 beta. For example, a randomized trial showing surgery improved survival at a *P* value of .08 would constitute level II evidence supporting the surgical therapy. A negative trial with a high beta error (low power) also would be in this category. For example, an RCT showing no benefit of drug A but having a beta error of 0.40 would constitute level II evidence against using drug A. The 40 percent beta error indicates the study only had a 60 percent chance of detecting a therapeutic benefit, i.e. the study had low power. Meta-analyses often are used with this level of evidence. By combining the results of smaller individual trials addressing the same hypothesis, these analyses attempt to increase the power and determine if conventional levels of significance are reached.

Grade C: Levels III, IV, and V Evidence. These studies are not randomized. Therefore, patients do not have an equal and random chance of being assigned to the treatment and control groups. Level III studies compare patients who received a particular therapy with contemporaneous patients who did not, while level IV studies utilize historical comparisons. Level V studies are case series reflecting the experience of a group of patients receiving a particular therapy without any associated control group.

reason is that methodologic ranking of evidence is essential in assessing the validity of a study, but is not helpful in evaluating its applicability. It is this feature of the MRC trial that has been most criticized, that is, the MRC trial was robust evidence against surgery 20 years ago, but is an anachronism in 1990. The question today is not whether surgery is a beneficial single therapy for SCCL but whether surgery is a useful initial therapy (in highly selected patients) followed by adjunct chemotherapy and radiation. Effective chemotherapeutic regimens had not yet been discovered at the time this study was performed. In addition, many patients were undoubtedly considered operable in the MRC trial despite having metastatic lesions that would be detected with the sophisticated imaging studies available today. The MRC study only included patients whose tumors could be reached with a rigid bronchoscope. These centrally located cancers do worse with surgery than more peripherally located tumors. In addition, the operations in the MRC study were pneumonectomies and subsequent studies have confirmed that patients undergoing lobectomies or segmental resections have better outcomes. Furthermore, the extent of intrathoracic disease was not described and 41 percent of the patients who underwent surgery had tumors that were not resectable at operation. It is likely, therefore, that many MRC patients from 1969 would not be considered surgical candidates by thoracic surgeons in 1990.

The rationale for operating on patients with very early stages of disease was bolstered by the development of effective oncologic regimens that could be employed postoperatively. In addition, it was known that recurrence, in patients who had responded to oncologic regimens, occurred in the chest in a majority of patients. The Veterans Administration report of asymptomatic pulmonary nodules included 11 SCCL.[7] These patients had virtually the same survival experience as study patients who had non-small cell bronchogenic carcinomas: a one-year survival of 64 percent and a five-year survival of 36 percent. The number of cases in this study was small and the clinical scenario atypical, considering the asymptomatic presentation and peripheral location of most tumors. However, the study demonstrated that selected patients with SCCL can experience long-term survival after surgery.

A cooperative trial in 1989 employed initial surgical resection in 112 patients with SCCL followed by randomization to two chemotherapeutic regimens.[8] Sixty-five patients were diagnosed postoperatively. Favorable early survival curves (two-year survival was 76 percent in stage I) correlated with pathologic TNM stage.

Based on studies,[9-16] some experts are recommending initial resection for very limited SCCL when there is no evidence of metastasis (including mediastinal exploration), followed by adjuvant chemotherapy and radiotherapy. Unfortunately, none of these studies tested the hypothesis: surgery improves survival in highly selected patients with SCCL. Therefore, the evidence supporting this position is subexperimental or experiential (grade C).

The survival curves in these studies may be seductive but have been "doctored" with biases analogous to what skilled plastic surgeons can do to reshape the body's curves. A majority of the patients in these studies were diagnosed postoperatively with SCCL. Thus, in many cases the survival of a patient with an asymptomatic pulmonary nodule has been compared to a symptomatic patient diagnosed preoperatively. The prognoses of these patients are very likely different, regardless of therapy.

Matching historical or cohort "controls" without randomization does not resolve the selection bias. Anatomic staging after surgery frequently advances the stage. Therefore, a patient whose clinical stage is I or II is apt to be a stage II or III postoperatively. Consequently, the subexperimental evidence compares patients with very early disease in surgical groups with more advanced patients treated conventionally and, by definition, staged clinically. Patients nonrandomly selected for surgery also may have better functional ability than nonsurgical comparisons; and functional status, generally unreported in these studies, is an independent predictor of survival in lung cancer.[17] In addition, patients chosen for surgery are more likely to have less comorbidity than those treated conventionally, which contributes to the overzealous attributions to surgical efficacy. Finally, excluding perioperative death from survival analyses comes close to saying you did not chop down the cherry tree.

The evidence does not support the routine recommendation for surgery in the infrequent patient with very limited SCCL. It might be argued that physicians often make recommendations with "grade C" evidence after a careful consideration of the potential benefits and risks in an individual patient. Yet, recent reports of prolonged survival[18] in conventionally treated patients with very limited SCCL add further support to the continued nonsurgical approach to this disease. I would hope those who do recommend surgery for SCCL produce a truly informed consent reflecting the subexperimental nature of the clinical evidence for surgical intervention. Additional requisites should be a negative mediastinal exploration and planned resection with a lobectomy or lesser procedure.

Robert Restifo, DO: The treatment plan for our patient was conventional chemotherapy and radiation. One month later, the oncologist discovered a small metastsis suggesting the disease was disseminated on presentation. She had a partial response to therapy and died 14 months after diagnosis. ■

REFERENCES

1. Hyde L, Yee J, Wilson R, Patino ME: Cell types and the natural history of lung cancer. *JAMA* 193:52-54, 1965.
2. Miller AB, Fox W, Tall, R: Five-year followup of the Medical Research Council comparative trial of surgery and radiotherapy for the primary treatment of small or oat cell carcinoma of the bronchus. *Lancet* 2:501-505, 1969.
3. Fox W, Scadding JG: Medical Research Council comparative trial of surgery and radiotherapy for primary treatment of small celled or oat celled carcinoma of the bronchus: Ten-year followup. *Lancet* 2:63-65, 1973.
4. Sackett DL: Rules of evidence and clinical recommendations on the use of antithrombotic agents. *Chest* 89, 2:25-35, 1986.
5. Matthews MJ, Kanhouwa S, Pickren J, Robinette D: Frequency of residual and metastatic tumor in patients undergoing curative surgical resection for lung cancer. *Cancer Chemother Rep* 4:63-67, 1973.
6. Mountain CF, Carr DT, Anderson WAD: A system for the clinical staging of lung cancer. *AJR* 120:130-138, 1974.
7. Higgins GA, Shields TW, Keehn RJ: The solitary pulmonary nodule: Ten-year followup of Veterans Administration Armed Forces Cooperative Study. *Arch Surg* 110:570-575, 1975.
8. Karrer K, Shields TW, Denck H, et al.: The importance of surgical and multimodality treatment for small cell bronchial carcinoma. *J Thorac Cardiovasc Surg* 97:168-176, 1989.
9. Bates M, Hurt R, Levison V, Sutton M: Treatment of oat cell carcinoma of bronchus by preoperative radiotherapy and surgery. *Lancet* 1:1134-1135, 1974.
10. Shore DF, Paneth M: Survival after resection of small cell carcinoma of the bronchus. *Thorax* 35:819-822, 1980.
11. Shields TW, Higgins GA, Matthews MJ, Keehn RJ: Surgical resection in the management of small cell carcinoma of the lung. *J Thorac Cardiovasc Surg* 84:481-488, 1982.
12. Davis S, Wright PW, Shulman SF, et al.: Long-term survival in small cell carcinoma of the lung: A population experience. *J Clin Oncol* 3:80-91, 1985.
13. Meyer JA: Five-year survival in treated stage I and II small cell carcinoma of the lung. *Ann Thoracic Surgery* 42:669-688, 1986.
14. Friess GG, McCracken JD, Troxell ML, et al.: Effect of initial resection of small cell carcinoma of the lung: A review of Southwest Oncology Group Study 7628. *J Clin Oncol* 3:964-968, 1985.
15. Ohta M, Hara N, Ichinose Y, et al.: The role of surgical resection in management of small cell carcinoma of the lung. *Jpn J Clin Oncol* 10:289-96, 1986.
16. Shepherd FA, Evans WK, Feld R, et al.: Adjuvant chemotherapy following surgical resection for small cell carcinoma of the lung. *J Clin Oncol* 6:832-838, 1988.
17. Pater JL, Loeb M: Nonanatomic prognostic analysis. *Cancer* 50:326-331, 1982.
18. Shepherd FA, Ginsberg R, Evans WK, et al.: "Very limited" small cell lung cancer (SCLC)—results of nonsurgical treatment. *Proc Am Soc Clin Oncol* 3:223, 1984 (abstr C-870).

Thrombolytic Therapy

in the Presence of Gastrointestinal Bleeding

NICHOLAS J. SCHNEEMAN, MD
ELLIOTT M. STEIN, MD

This case report describes an appropriate exception to well-known contraindications of the use of thrombolytic therapy including a brief discussion regarding the use of thrombolytic agents in pulmonary embolism and the hemorrhagic events associated with them.

Hemorrhagic complications of thrombolytic therapy are well described in the medical literature.[1-3] Concerns regarding these complications have led to the development of relative and absolute contraindications to thrombolytic therapy. We present a case of massive pulmonary embolism treated successfully with streptokinase in the presence of gastrointestinal (GI) bleeding, a remote history of reversible ischemic neurologic deficit (RIND), and advanced age.

CASE REPORT

An 83-year-old, vigorous white female was admitted to our hospital for a profound hypochromic, microcytic anemia, (HG, 6.6; MCV, 75.4). Two years previously, the patient started aspirin therapy due to a RIND. On admission, stools were guaiac positive and iron studies supported the diagnosis of iron deficient anemia. A gastrointestinal workup (including an upper GI series, small-bowel follow through, and colonoscopy) was normal. Aspirin was discontinued. The patient was transfused and hemoglobin (HG) stabilized at 10.9. Hospitalization was extended to ten days due to a localized phlebitis and cellulitis of the left arm.

Two days after discharge, the patient was seen in the emergency room with sudden onset of in-

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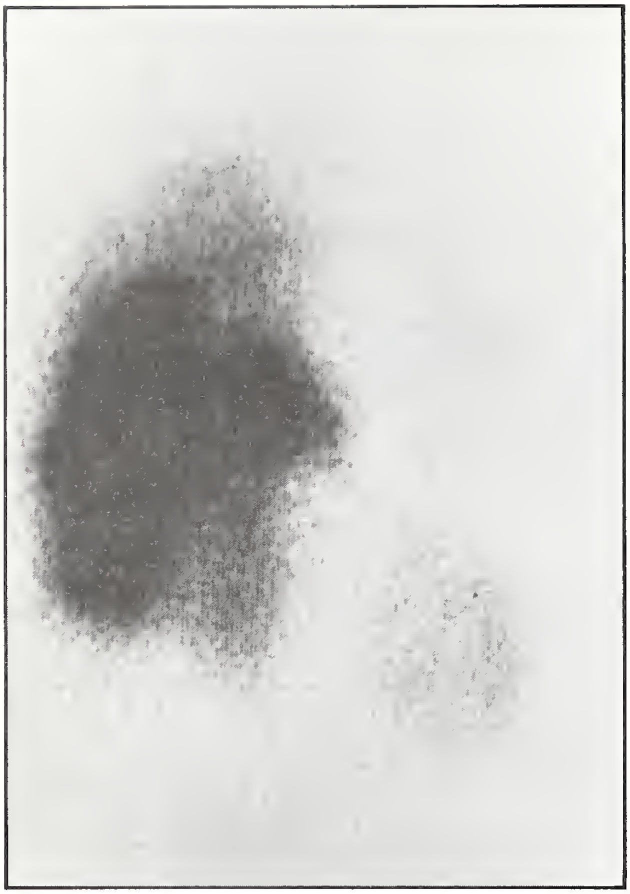

Figure 1. Pretreatment technetium-99 perfusion scan.

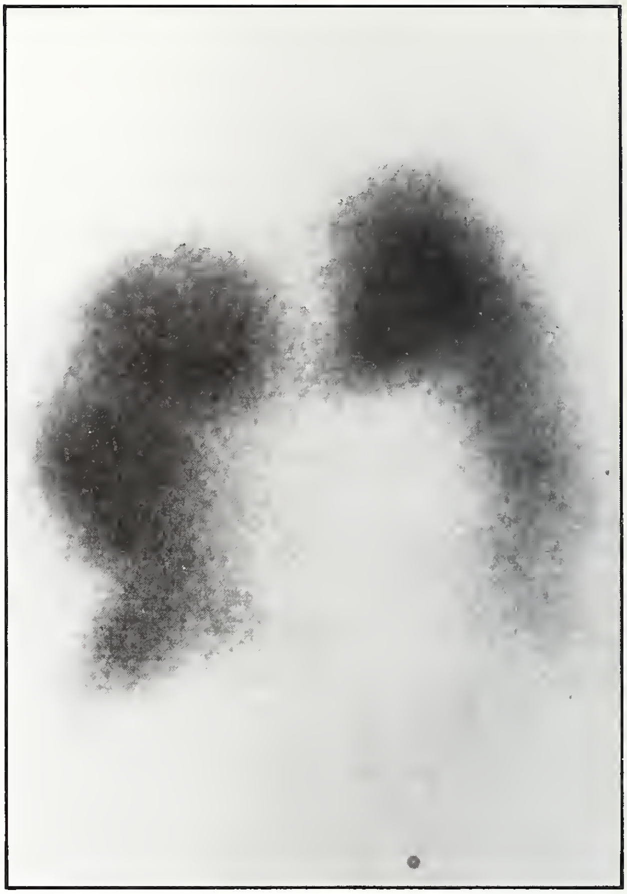

Figure 2. Post-treatment technetium-99 perfusion scan.

capacitating dyspnea. Severe hypoxia on 100 percent oxygen ($PO_2$50), clear lung fields, and an unremarkable chest x-ray suggested the diagnosis of pulmonary embolism. Confirmation was obtained by a technetium-99 perfusion lung scan demonstrating virtually no filling of the left lung and multiple defects in the right lung (Figure 1). The patient was intubated and placed on assisted mechanical ventilation. Despite this, she became more hypoxic ($PO_2$38 on 100 percent O_2) and tachycardic (HR, 120). The patient's hemoglobin had not fallen since the previous admission; however, the rectal examination revealed dark, loose, guaiac positive stool. The nasogastric aspirate was guaiac negative. The total elapsed time since onset of symptoms was approximately four hours and the working diagnoses were massive pulmonary embolism with respiratory failure and very recent or active lower GI bleeding.

After consultations with a vascular surgeon, gastroenterologist, and the patient's family, thrombolytic therapy was instituted via a Swan-Ganz catheter. A bolus of 250,000 units of streptokinase was given into the pulmonary artery over 30 minutes. Ten minutes after the infusion began, there was evidence of clot lysis: the pulmonary artery diastolic pressure decreased from 40 mm Hg to 15 mm Hg with a simultaneous decrease in heart rate from 120 beats/min to 80 beats/min. However, the patient became more hypotensive with a systolic blood pressure of 60 mm Hg. Arterial blood gases revealed a severe metabolic acidosis but markedly improved oxygenation ($PO_2$100). Aggressive fluid, vasopressor, and ventilatory management resulted in hemodynamic stability within two hours. A main-

When both the potential risks and benefits of a prescribed treatment are so greatly augmented, as in this case, it becomes difficult to be sure one is adhering to the "primum non nocere" principle. We do not take this principle lightly.

tenance dosage of 100,000 units of streptokinase was infused over the next 24 hours and then standard heparin therapy was initiated. The stools remained guaiac positive but the hemoglobin did not drop.

A repeat perfusion scan was obtained 36 hours after the initial scan (Figure 2). There was dramatically increased perfusion of the left lung and some increase in the right lung. After obtaining negative aortoiliac and lower extremity sonograms, a Greenfield vena cava filter was placed transvenously on the fourth day of hospitalization. Anticoagulation therapy was changed to a three-month course of low-dose warfarin. Six months after discharge, the patient was found to have no appreciable morbidity from the pulmonary embolism.

DISCUSSION

Attention to primary prevention and early detection of thrombophlebitis, coincident with aggressive secondary medical management, brought about a decrease in pulmonary embolism mortality between 1970 and 1985.[4] Continued improvement in managing this condition may come from the use of thrombolytic agents. Although specific indications for their use in pulmonary embolism have not been established clearly, many sources advocate the use of thrombolytic agents in massive pulmonary embolism.[3,5,6] Not only do these cases demonstrate higher mortality, but morbidity is exacerbated by large loss of functional lung tissue and the development of pulmonary hypertension. When given early in the course of massive pulmonary embolism, thrombolytic agents have been extremely effective in promoting clot lysis, increasing lung capillary volume, and reversing pulmonary hypertension.[2] Another potential benefit is the eradication of residual thrombus in the deep veins.

Unfortunately, hemorrhagic events associated with thrombolytic use are not rare. One study found 27 of 167 patients required blood transfusions after using either urokinase or streptokinase for pulmonary embolism.[1] Vessel wall damage seems to be the most important etiologic factor. Indeed, catheterization sites for invasive procedures are the principle source of bleeding in all studies.[2] Thus, conditions that predispose to vascular injury, rather than coagulation abnormalities, appear to carry higher risk. Published lists of contraindications to thrombolytic therapy bear this out. Active internal bleeding, recent stroke, or other active intracranial processes are regarded as absolute contraindications. Relative contraindications include uncontrolled hypertension or recent surgery, vessel puncture, obstetrical delivery, gastrointestinal bleeding, and trauma. There are numerous minor contraindications including age greater than 75.[7]

Our patient suffered a massive pulmonary embolism and continued to be severely hypoxic and tachycardic despite maximal support. Invasive monitoring demonstrated impressive pulmonary hypertension. There also was evidence of very recent or active GI bleeding. Without further intervention, however, we felt death from acute respiratory failure was inevitable. Heparin therapy alone, while having a lower risk of hemorrhage, would not have changed her prognosis. At best, heparin therapy would only prevent further embolic events. Therefore, we decided to use thrombolytic therapy even though the patient had recognized contraindications.

The method of administration was the full dose streptokinase protocol approved for pulmonary embolism in our institution. Another regimen described in the literature involves administering low-dose streptokinase (10-20,000 units/hour) in combination with heparin.[8] Discontinuing the streptokinase after evidence of clot lysis was another option. These are alternative approaches that may not provide the same continued local and systemic benefits of full dose thrombolytic therapy.

The decision to use streptokinase in this patient violated many published lists of absolute and relative contraindications to thrombolytic therapy. Yet the patient was in great need. When both the potential risks and benefits of a prescribed treatment are so greatly augmented, as they were in this case, it becomes difficult to be sure one is adhering to the "primum non nocere" principle. We do not take this principle lightly nor do we advocate a more cavalier approach to the use of thrombolytic therapy. However, extreme circumstances require extreme measures. We present this case to illustrate an appropriate exception to well-known guidelines. ■

REFERENCES

1. Cooperative Study: Urokinase-streptokinase embolism trial, phase 2 results. *JAMA* 229: 1606-1613, 1974.

2. Marder VJ, Sherry S: Thrombolytic therapy: Current status. *N Engl J Med* 318: 1512-1520, 1988.

3. Marder VJ, Sherry S: Thrombolytic therapy: Current status. *N Engl J Med* 318: 1585-1595, 1988.

4. Gillum RF: Pulmonary embolism and thrombophlebitis in the United States, 1970-1988. *Am Heart J* 114: 1262-1264, 1987.

5. Trulock EP: Approaches to deep venous thrombosis and pulmonary embolism in aging patients. *Geriatrics* 43: 101-113, 1988.

6. Wenger NK: Pulmonary embolism. *Postgraduate Medicine* 84: 107-115, 1988.

7. National Institutes of Health Consensus Development Conference: Thrombolytic therapy in thrombosis. *Ann Intern Med* 93: 141-144, 1980.

8. Leeper KV Jr, Popovich A: Treatment of massive acute pulmonary embolism and low-dose streptokinase and heparin. *Chest* 93: 234-240, 1988.

Pelvic Papillary Neoplasia

Along the Round Ligament Simulating Inguinal Hernia

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ANTHONY TONZOLA, MD

Papillary serous adenocarcinoma along the round ligament in a female is not invariably metastatic from the ovary, but may arise de novo from the multipotential pelvic peritoneum; it may mimic an inguinal hernia.

A 59-year-old woman was admitted to Rahway Hospital in August 1987, for repair of an incarcerated right inguinal hernia. During surgical exploration of the inguinal canal, the round ligament was identified with a tumor mass attached to it. Frozen section diagnosis was "papillary adenocarcinoma, probably metastatic." Histological examination of the tumor revealed skeletal muscle and adipose tissue infiltrated with large nests of mucin-producing papillary serous adenocarcinoma showing psammoma bodies that suggested a metastasis from a primary ovarian neoplasm (Figure). Following removal of the tumor, extensive clinical evaluation (gallium scan, computed tomography (CT) scan, thyroid scan, and mammogram) was normal. Past medical history included an abdominal hysterectomy and bilateral salpingo-oophorectomy in 1984 because of uterine bleeding. The uterus showed multiple leiomyomata and extensive adenomyosis. Both ovaries and Fallopian tubes were grossly normal and histologically benign.

The patient was readmitted a year later because of a recurrent mass in the right groin area. At surgery, a tubular segment of indurated skeletal muscle and adipose tissue measuring 11 x 4 x 3 cm was removed. Gross inspection revealed most of the specimen to be replaced by a partially cystic seromucinous tumor. In addition, suture material from previous surgery was identified. Histological examination revealed skeletal muscle to be largely infiltrated by papillary serous adenocarcinoma with heavily calcified psammoma bodies. A single iliac lymph node was free of tumor. The patient had a recurrence of the tumor in May 1989, and presently is being treated with Cytoxan® and cisplatin.

DISCUSSION

Tumors of the round ligament are rare; they may be benign or malignant, primary or metastatic.[1]

From Rahway Hospital, where Drs. Peison and Benisch are affiliated with the Department of Pathology and Dr. Tonzola is affiliated with the Department of Surgery. This manuscript was submitted in December 1989 and accepted in March 1990. Requests for reprints may be addressed to Dr. Peison, Rahway Hospital, 865 Stone Street, Rahway, NJ 07065.

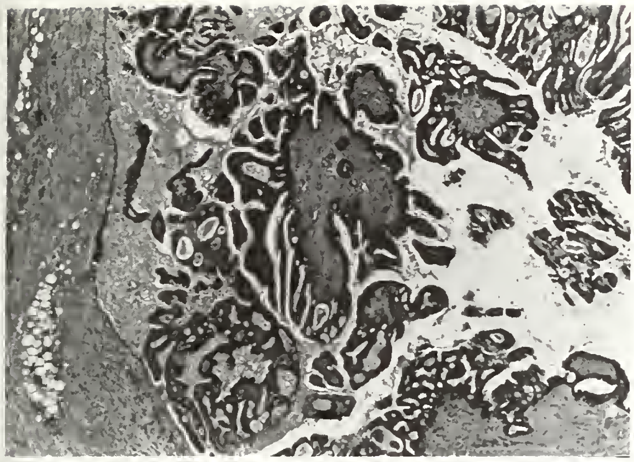

Figure. Papillary serous adenocarcinoma arising along the round ligament in a 59-year-old female patient (hematoxylin and eosion x 20).

Some lesions may arise from adjacent embryonic mesonephric structures related to endometriosis or from the mesothelium. The latter usually are papillary serous adenocarcinomas. While the peritoneum is a frequent site of metastatic tumor, primary neoplasms are rare. However, there is a small group of primary papillary tumors of the peritoneum that differs significantly from the usual diffuse mesothelioma of papillary type, overlaps with the microscopic morphology of ovarian papillary serous carcinoma, and appears to be derived from extra-ovarian mesothelium of müllerian origin.[2]

Peritoneal papillary carcinoma is a rare tumor that has a predilection for the pelvic peritoneum in women. Histologically, peritoneal papillary carcinoma is identical to ovarian papillary serous carcinoma, but either spares or only microscopically involves the surface of the ovaries. The absence, however, of a primary ovarian neoplasm must be ruled out by careful evaluation of the internal genitalia, pelvis, and peritoneal cavity.

Peritoneal papillary serous tumors have been noted in the literature for over 30 years.[3] However, these tumors received little attention until 1977, when Kannerstein et al.[4] reported 15 cases and emphasized the need for separating extra-ovarian serous papillary carcinoma from malignant mesothelioma. Although no single feature is of absolute differential diagnostic value, the presence of columnar tumor cells, psammoma bodies, and epithelial mucin, and the absence of hyaluronic acid favor the diagnosis of papillary carcinoma rather than mesothelioma.

Immunohistochemical techniques appear to indicate that mesothelioma stains intensely with keratin antisera and weakly or negatively with carcinoembryonic antigen (CEA) antisera, while adenocarcinoma stains intensely with CEA antisera and weakly or negatively with keratin antisera.[5]

Ulbright et al. described a retroperitoneal neoplasm in an 11-year-old girl with a microscopic appearance identical to that of papillary serous carcinoma of ovary.[6] There was no evidence of ovarian involvement. Immunohistochemical staining for amylase was positive within the cytoplasm of tumor cells. Since amylase is a marker for serous ovarian tumors, this finding supports the belief that ovarian-type neoplasms that occur at ectopic locations essentially are identical to their ovarian counterpart.

Extra-ovarian serous carcinoma is a rare lesion as compared with the usual ovarian serous tumors. In focal extra-ovarian serous carcinoma, the peritoneal surfaces of the female genital organs are studded with tumor resembling ovarian serous carcinoma, while the ovarian parenchyma either is spared or only minimally involved.[7] By light microscopy, these tumors share many of the histopathological features of serous ovarian carcinoma and were regarded as ovarian carcinoma with widespread metastases.

Gooneratne et al. studied 16 cases from two institutions, and felt these tumors were distinct and should be separated from the usual serous papillary carcinoma.[8] However, Gooneratne did favor origin from ovarian surface epithelium rather than mesothelium and used the terminology of "serous surface papillary carcinoma" for this tumor. It now is accepted that the ovarian surface (germinal) epithelium is derived from the basic coelomic epithelium or mesothelium.

Four of Gooneratne's cases had coexisting second primary neoplasms, three cases had carcinoma of the endometrium, and one case had endometrioid carcinoma of the ovary. The survival of the patients was shorter than that of patients with ovarian serous papillary carcinoma of the same grade without predominant surface involvement.

Kannerstein et al. also concluded that these lesions should not be classified as mesotheliomas, especially since this might imply similarities in etiology and treatment.[4] During a study of 25 peritoneal papillary tumors in women, Foyle et al. found these tumors exhibited a wide range of morphology, from well-differentiated mesothelial proliferations to neoplasms with morphologic characteristics of multiple focal extra-ovarian serous carcinoma.[2] Foyle suggested these tumors were derived from mesothelium and should be termed "extra-ovarian serous papillary carcinomas." Mills et al. compared the biologic behavior of 10 patients with serous surface papillary carcinoma to a control group of 16 patients with serous ovarian papillary carcinoma, and found serous surface papillary carcinoma had a significantly worse prognosis than serous ovarian papillary carcinoma.[9] Four patients had coexistent, nonperitoneal, müllerian-type carcinomas.

The relationship between serous proliferations of the ovary and histologically identical lesions of the peritoneum is complex. When an ovary contains intraparenchymal serous carcinoma and carcinomatous foci involve the peritoneum, the latter conventionally are considered metastases. This viewpoint cannot be applied, however, when a clearcut ovarian carcinoma is lacking as is the situation in the present report.

A more plausible explanation is that a neoplastic "field effect" involving the peritoneum and ovarian surface gives rise to multiple foci of synchronous primary neoplasia. Supporting the latter theory for the origin of serous surface papillary carcinoma is the occurrence of malignant peritoneal serous neoplasms following prophylactic oophorectomy in women prone to ovarian cancer.[10] These separate carcinomas associated with serous surface papillary carcinoma suggest that a "field effect" phenomenon may extend beyond the peritoneum and ovary and involve the omentum, mesentery, or retroperitoneum.

Long-term survival among patients with this tumor have been rare. Chen et al. reported the clinicopathologic features of 3 patients with diffuse peritoneal involvement in which the patients, treated with chemotherapy (Adriamycin®, cisplatin, and Cytoxan®) had no evidence of disease five or more years after initial diagnosis.[7] White et al. reported 11 patients with serous surface papillary carcinoma of the ovary. The tumor was bilateral in all but 1 patient, and all patients had omental peritoneal implants. All patients underwent total abdominal hysterectomy and salpingo-oophorectomy and were treated with chemotherapy (Adriamycin®, cisplatin, and Cytoxan®). Eight patients died, 2 patients are alive with clinical evidence of recurrence, and 1 patient is alive without evidence of disease at 44 months.[11] Genedry et al.[12] described 154 patients with primary papillary peritoneal neoplasia followed for a period from 2 to 40 years. Genedry felt the disease is best understood as a primary peritoneal tumor, possibly developing on the basis of irritating agents reaching the abdominal cavity from the lower genital canal, a process similar to one proposed for the genesis of endometriosis. Genedry also stated that the outcome without adjunctive therapy is excellent; thus, such therapy is contraindicated in view of the death of only 2 of 154 patients with disease. Dalrymple et al., in a comparison study of 31 patients with an initial diagnosis of extra-ovarian serous papillary carcinoma, matched for stage and grade of disease with a series of 139 patients with primary epithelial ovarian carcinoma and managed similarly, showed no difference in survival.[13] The median survival times were 11.3 months for patients with extra-ovarian serous papillary carcinomas and 13.5 months for patients with equivalent primary ovarian neoplasms.

Our patient had a serous papillary carcinoma, probably derived from remnants of the pelvic coelomic epithelium (canal of Nuck) that accompanies the round ligament in the inguinal canal, and mimicked an inguinal hernia. Once a serous papillary tumor was found, the likelihood of ovarian metastases became pronounced; although this may be the case in the majority of cases, it is well to be aware that serous papillary tumors may arise de novo from the pelvic peritoneum and not be indicative of metastatic disease. ■

REFERENCES

1. Breen JL, Neubecker RD: Tumors of the round ligament. *Obstet Gynecol* 19:771-780, 1962.
2. Foyle A, Al-Jabi M, McCaughey WTE: Papillary peritoneal tumors in women. *Am J Surg Pathol* 5:241-249, 1981.
3. Swerdlow M: Mesothelioma of the pelvic peritoneum resembling papillary cystadenocarcinoma of the ovary. *Am J Obstet Gynecol* 77:197-200, 1959.
4. Kannerstein M, Churg J, McCaughey WTE, Hill DP: Papillary tumors of the peritoneum in women: Mesothelioma or papillary carcinoma. *Am J Obstet Gynecol* 127:306-314, 1977.
5. Holden J, Churg A: Immunohistochemical staining for keratin and carcinoembryonic antigen in the diagnosis of malignant mesothelioma. *Am J Surg Pathol* 8:277-279, 1984.
6. Ulbright TM, Morley DJ, Roth LW, Berkow RL: Papillary serous carcinoma of the retroperitoneum. *Am J Clin Pathol* 79:633-637, 1983.
7. Chen KTK, Flam MS: Peritoneal papillary serous carcinoma with long-term survival. *Cancer* 58:1371-1373, 1986.
8. Gooneratne S, Sassone M, Blaustein A, Talerman A: Serous surface papillary carcinoma of the ovary: A clinicopathologic study of 16 cases. *Int J Gynecol Pathol* 1:258-269, 1982.
9. Mills SE, Andersen WA, Fechner RE, Austin MB: Serous surface papillary carcinoma. A clinicopathologic study of ten cases and comparison with stage III-IV ovarian serous carcinoma. *Am J Surg Pathol* 12:827-834, 1988.
10. Tobacman JK, Tucker MA, Kase R, et al.: Intraabdominal carcinomatosis after prophylactic oophorectomy in ovarian cancer prone families. *Lancet* 2:759-767, 1982.
11. White PF, Merino MJ, Barwick KW: Serous surface papillary carcinoma of the ovary: A clinical, pathologic, ultrastructural, and immunohistochemical study of 11 cases. *Pathol Ann* 20:403-418, 1985.
12. Genedry R, Poliakoff S, Rotmensch J, et al.: Primary, papillary peritoneal neoplasia. *Obstet Gynecol* 5:730-734, 1981.
13. Dalrymple JC, Bannatyne P, et al.: Extraovarian peritoneal serous papillary carcinoma. A clinicopathologic study of 31 cases. *Cancer* 64:110-115, 1989.

Calcified Liver Lesions

JAMES H. JACOBY, MD
FRANCIS X. O'BRIEN, MD

The authors present the differential diagnosis and the pathogenesis of calcified liver lesions found on computed tomography scan.

A 45-year-old Oriental female had a one-month history of progressive generalized pruritus. Aside from a prior history of exposure to tuberculosis, she was in good health. The patient smoked 1½ packs of cigarettes per day for 25 years. The patient noted her appetite had been fair to poor, and her stools to be occasionally light and her urine to be dark. Physical examination revealed the patient to be clearly jaundiced. Rectal examination was negative and stools were heme negative.

Laboratory data revealed her urine to have 4+ bilirubin. Her hepatitis profile was positive for prior exposure to hepatitis B and hepatitis A viruses, but there was no evidence of current infection. Serum alkaline phosphatase was 1,830 (normal 37 to 158). Her hemoglobin was 11.5 g/dL. Serum bilirubin was 3.35 mg/dL (normal .2 to 1.1 mg/dL) with a direct bilirubin elevated at 2.59 mg/dL (normal 0 to .2 mg/dL). GGT was elevated at 441 units/L (top normal 45 units/L). SGOT was 130 units/L (top normal 40 international units/L). SGPT was 252 units/L (top normal 50 international units/L). Her sedimentation rate was 49 mm/hr (top normal 30 mm/hr).

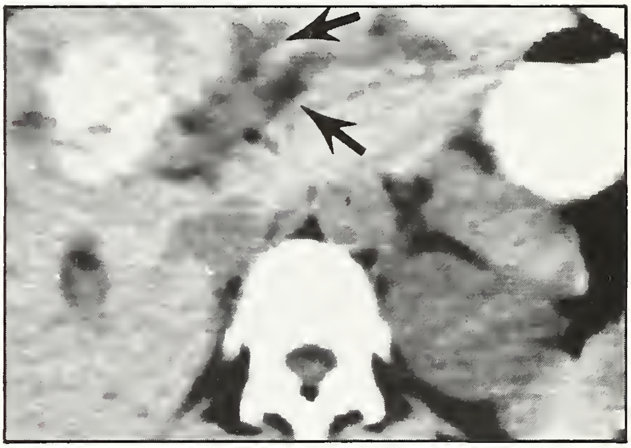

Figure 1. CT scan demonstrating a central calcified mass. Note multiple hypodense areas within the liver (arrows).

Ultrasound evaluation of the patient's right upper quadrant revealed two echogenic masses in the right lobe of the liver. Her common hepatic bile duct was

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normal with no evidence of dilatation or obstruction. Subsequent computed tomography (CT) scan of her abdomen is noted in Figures 1 and 2.

DISCUSSION

CT scan demonstrated a 4.7 cm calcified intrahepatic mass at the junction of the right and left lobes of the liver (Figure 1). Central intrahepatic biliary ductal dilatation is seen as hypodense branching structures. Ultrasonography noted the common hepatic bile duct is of normal caliber, indicating therefore, that the level of this patient's biliary obstruction is above the level of the common hepatic bile duct and is related to the demonstrated calcification. A second smaller lesion measuring 1 cm is noted adjacent to the large intrahepatic calcification (Figure 2).

Both benign and malignant lesions may calcify, although this finding more commonly is seen with malignancies. Benign hemangiomas present as discrete homogeneous areas of diminished attenuation and only uncommonly will calcify. Following bolus intravenous contrast enhancement, these lesions are said to characteristically demonstrate progressive enhancement from the periphery until these lesions become isodense. This characteristic finding is seen, however, only in approximately 50 percent of the cases. Magnetic resonance evaluation demonstrates a characteristic very intense signal on heavily weighted T2 images. The pattern of central calcification noted in this patient is not characteristic of hemangioma.

Hepatomas are known to calcify in approximately 10 percent of patients. Indeed, the incidence of hepatomas in the Asian population is greater than that in the United States population. In the Oriental population, hepatocellular carcinoma frequently occurs in association with cirrhosis. In contradistinction, in the United States population, these tumors frequently arise de novo. Frequent presentation is that of pain, weight loss, and palpable abdominal mass with associated elevation of serum alphafetoprotein. These tumors may be solitary or multiple, encapsulated or diffuse. This diagnosis was a consideration in this patient despite the lack of typical presenting signs and symptoms.

Metastatic disease is the most common liver malignancy. Hepatic calcifications noted by CT have been described in a variety of tumors including metastasis from the colon, breast, kidney, ovary, pancreas, stomach, melanoma, neuroblastoma, pleuromesothelioma, osteosarcoma, leiomyosarcoma, carcinoid, cholangiocarcinoma, myeloma, and lymphoma. Of these tumors, colorectal metastases most commonly are associated with calcification; however, this still is a relatively uncommon presentation.

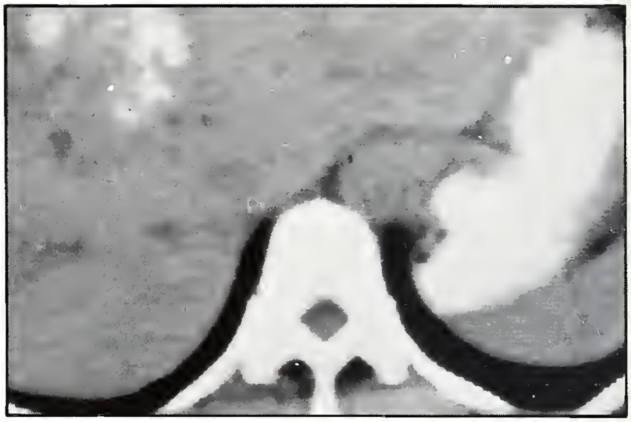

Figure 2. CT scan demonstrating second small calcific focus adjacent to the large calcified mass.

This patient subsequently had outpatient endoscopic retrograde cholangiopancreatography (ERCP) that showed a normal caliber common bile duct without filling of intrahepatic radicals. This was followed by a CT guided-needle aspiration of the liver mass, the cytology of which was positive for malignant cells of the well-differentiated adenocarcinoma type consistent with gastrointestinal origin. Biopsy at colonoscopy revealed a primary malignancy.

The pathogenesis of calcification is felt to be produced by the tumor itself or more commonly is secondary to dystrophic calcifications related to necrosis and hemorrhage within the mass. The pattern of the calcification in metastases may be coarse and conglomerate, as in this case, or fine and granular, punctate, or discrete and nodular. The pattern and distribution of calcification, however, is variable and nonspecific. It is interesting to note that calcifications sometimes develop following radiation therapy and/or chemotherapy. Pre-existing calcifications sometimes display a changing pattern of increasing density following therapy. There appears to be no prognostic significance to these findings, however.

DIAGNOSIS

The diagnosis is calcified colon metastasis to the liver causing intrahepatic biliary obstruction. ■

REFERENCES

1. Lee, JK, Sagel SS, Stanley RJ: *Computed Body Tomography with MRI Correlation, 2nd Edition.* New York, NY, Raven Press, 1989.

2. Scatarige JC, Fishman EK, Saksouk FA, Siegelman SS: Computed tomography of calcified liver masses. *JCAT* 7:83-89, 1983.

Pneumothorax

Complication of Needle EMG of Thoracic Wall

JEFFREY MILLER, DO

Pneumothorax following needle electromyography (EMG) has been reported in physical rehabilitation literature but not in general medical literature. The cases have involved the supraspinatus,[3] paracervical,[1] serratus anterior muscles,[2] as well as nerve conduction at Erb's point.[4] This case involves a patient who developed a pneumothorax following EMG nerve conduction studies of the rhomboid muscles, the first reported case to date.

A 56-year-old, thin white male had needle EMG to evaluate a C5 neuropathy. The patient was a heavy ethanol and cigarette abuser with emphysema, who had undergone a left mandibulectomy and radical neck dissection, followed by radiotherapy for head and neck cancer. The procedure produced several neurologic complaints including numbness of the left arm, shoulder, and upper back, and resulted in the physical distortion of the patient's left face and neck. EMG studies were performed to evaluate a C5 radiculopathy.

The left rhomboid major muscle was examined and the study concluded without incident. Approximately 40 minutes later, the patient became acutely anxious, restless, and short of breath. Chest x-ray revealed a large left pneumothorax with rightward shift of the mediastinum. Tube thoracostomy immediately relieved these symptoms.

Pneumothorax is an infrequent complication of needle EMG, but the medical community needs to be aware of its occurrence. These cases can arise when the muscle under study overlies the thorax, neck, or axilla, and puncture of the pleural cavity becomes possible. It is unlikely this patient could have had a spontaneous pneumothorax following rupture of a bleb due to his emphysema. The EMG involved a muscle overlying the thorax; the pneumothorax occurred on the side that had been needled, and the patient's symptoms were temporally related to the study. It is possible that this patient was predisposed to pneumothorax as the result of his prior radical head and neck surgery. The anatomic distortions and consequent fibrosis following surgery, possibly affecting the pleura, could have made puncture of the pleura more likely.

This event is consistent with other reported cases. In prior cases, the time during which pneumothorax occurred ranged from immediately after the study to three days later. In this instance, symptoms occurred within 40 minutes. In prior cases, the pneumothorax was typically small, ranging from 10 to 20 percent, and either was treated conservatively or by tube thoracostomy. This case was more severe than most in that it involved near total collapse of the lung and produced tension in the pleural cavity that compressed the mediastinal structures and necessitated the use of a chest tube.

A literature search for similar cases revealed four references.[1-4] EMG of the thorax is not a benign procedure and the risk of pneumothorax must be weighed against its diagnostic benefits when selecting patients. ■

Dr. Miller is affiliated with UMDNJ. The manuscript was submitted in December 1989 and accepted in March 1990. Address requests to Dr. Miller, 7000 Blvd. East, 47A, Guttenberg, NJ 07093.

REFERENCES

1. Honet JE, Honet JC, Cascade P: Pneumothorax after electromyographic electrode insertion in paracervical muscles: Case report and radiologic analysis. *Arch Phys Med Rehabil* 67:601-603, 1986.
2. Johnson EW, Parker WD: Electromyography examination, in Johnson EW (ed), *Practical Electromyography.* Baltimore, MD, Williams & Wilkins, 1980, pp 1-16.
3. Rubenstein L, Twardzik FG, Mech KF Jr: Pneumothorax: A complication of needle electromyography of the supraspinatus muscle. *Arch Phys Med Rehabil* 68:561-562, 1987.
4. Peak JB, Roth JL, Schuchmann GF: Pneumothorax: A complication of nerve conduction studies using needle stimulation. *Arch Phys Med Rehabil* 63:187-188, 1982.

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NOTEBOOK

TRUSTEES' MINUTES

A regular meeting of the Board of Trustees was held on June 10, 1990, at the executive offices in Lawrenceville. Detailed minutes are on file with the secretary of each county society. A summary of significant actions follows:

Report of the President . . .
(1) Hospital Medical Staff Section Representative . . . Approved the appointment of Dr. George T. Hare as the Hospital Medical Staff Section representative.
(2) New Jersey State Medical Underwriters, Inc., President . . . Noted the search for a new president is underway.
(3) Ad Hoc Committee on Uncompensated Care . . . Noted Dr. Costabile's announcement of an ad hoc committee to study the uncompensated care issue, with Dr. Louis L. Keeler as chairman and Drs. John C. Baker, Charles J. Moloney, Irving P. Ratner, and Richard H. Sharrett as members.
(4) H.R. 4566—Medicare Malpractice Dispute Resolution Act of 1990 . . . Noted Dr. Costabile's suggestion that letters be written to New Jersey's congressional delegation supporting H.R. 4566.

Report of Executive Director . . .
(1) MSNJ Paid Membership . . . Noted paid membership totaled 7,019 members as of May 31, 1990.
(2) Legislation . . . Noted the following bills: S-642—Commissioner of Health (permitting nonphysician to be commissioner of health): MSNJ continues to oppose this bill; S-1272—Generic Substitution/Prescription Blank Change: no movement on the bill; S-2051—Dispensing of Drugs by Physicians: amended in committee; S-2607—Clear and Convincing Evidence in Licensure Action (establishing clear and convincing as the burden of proof in a licensure action): out of committee and favorable consideration is expected in the Senate; and A-743—Optometric Drug Use: released from committee and MSNJ continues to lobby against the bill.
(3) Litigation . . . Noted the following: MSNJ versus Merin: hearing date has been postponed until early fall; State Board of Medical Examiners versus Carrier Foundation (action by SBME against a physician in a disciplinary matter): the order issued by the Superior Court of New Jersey determined that the records obtained from the Community Mental Health Center through SBME's subpoena are to be stricken from the disciplinary records, physician's records are to be sealed, and SBME is temporarily and permanently enjoined from obtaining or utilizing any medical or psychiatric records without the consent of the physician; Medical Waste Registration/Refunds: refunds must be paid by July 2, 1990, and all physicians need to clarify class of registration, and physicians experiencing difficulty regarding DEP medical waste regulation should contact MSNJ; Anti-Smoking Coalition: MSNJ is on record as favoring anti-smoking legislation but not in favor of supporting a separate lobbying mechanism; SBME/Fee Complaint (involving a physician who placed a delinquent fee matter into litigation): and MSNJ is observing the case carefully; SBME versus Sinha: decision still is pending; MSNJ versus State Board of Physical Therapy: court has not rendered a decision; and PRO versus MSNJ: rulings state:

> As a matter of law, there is no reason why a physician's response to PRO of New Jersey, Inc. must be done personally in order for PRO to consider it. Likewise, there is no reason why a response made by counsel who has been retained to represent the physician during the peer review process is not binding on the physician.
>
> PRO of New Jersey, Inc. is entitled to communicate directly with physicians to initially notify them that a potential quality problem exists, in furtherance of PRO's contractual and statutory obligations.
>
> The motion of PRO of New Jersey, Inc. for a protective order prohibiting the defendants from deposing Mr. Madden and Mr. Margolies will be denied.

UMDNJ Report . . . Noted the following items from Dr. Bergen's monthly report: appreciation for MSNJ's support of increased funding for nursing and allied health education in academic institutions and hospital settings; joint nursing program with Middlesex County College and UMDNJ; photographic display at UMDNJ-Smith Library of Newark City Hospital/ Martland Medical Center; and Dr. Peter Lobel, assistant professor of pharmacology, is the 1990 Searle Scholar.

NJ Hospital Association . . . Noted the following items from Mr. Scibetta's monthly report: denial of the across-the-board adjustment to the labor proxy of hospital rates; the first meeting of the Governor's Commission on Health Care Costs suggested major reform is necessary in the areas of affordability of health care insurance, changing the hospital reimbursement system to further contain costs; and more coordination of the planning and financing of health care services.

Committee on Annual Meeting . . . Approved the daily schedule for the 1991 Annual Meeting and the following:

That the 225th Annual Meeting of MSNJ be at the Trump Taj Mahal Casino Resort in Atlantic City, from Saturday, April 27 through Wednesday, May 1, 1991.

Council on Medical Services . . . Approved the following:

That MSNJ conduct a data-gathering survey on the issue of abuses by insurance companies (delay of payment, harassment, etc.).

Also approved the following recommendations:

That MSNJ recognize that Pennsylvania Blue Shield is inappropriately denying or postponing payments for prostatectomy in cases of carcinoma of the prostate where precertification is not required.

That MSNJ request Pennsylvania Blue Shield to amend its payment procedures so that delays and/or denials in payment for prostatectomy in cases of carcinoma of the prostate are eliminated.

That MSNJ request Pennsylvania Blue Shield to review its payment procedures in all cases where precertification numbers are not required, as well as other such procedures having no number due to emergency circumstances.

Task Force on Patient Care for the Under-Insured . . . Voted to refer the following recommendation back to the Task Force for further consideration and to the Hospital Medical Staff Section for their input:

That the mechanism of payment for services under the Uncompensated Care Trust Fund be administered via a hospital-created intermediary concept.

New Business . . .

(1) Walkathon To Benefit Women and Children with AIDS . . . Noted that the opinion of the Board was that the program should be supported on an individual basis, not for MSNJ to be a corporate sponsor.

(2) Medicare Physician Regulation Relief Amendments of 1990 . . . Referred the Medicare-related issues to the AMA Delegation as these issues will be considered at the upcoming AMA Annual Meeting.

(3) Proposal for Improving U.S. Health Care System . . . Referred to the AMA delegation for consideration the proposal and resolution from the Medical Society of the State of New York calling for improvements to the U.S. health care system.

(4) A-3531—Prescription Privileges for Nurse/Midwives . . . Voted to oppose this bill that would grant prescriptive authority for nurse/midwives under their standing orders within their protocols.

Correspondence . . . Received correspondence from the following: Frances J. Dunston, MD, MPH, State Commissioner of Health, in response to MSNJ's concerns about the need to provide due process in the quality assurance plans of New Jersey's UROs; review organizations; Congressman H. James Saxton in response to MSNJ concerning H.R. 3102, Public Health Response to AIDS Act of 1989, and stating he will keep MSNJ's views in mind when the bill reaches the House floor; and Congressman Chris Smith in response to MSNJ's concerns regarding Medicare regulations. ☐

A meeting of the Board of Trustees was held on May 5, 1990, at the Sands Hotel, Casino and Country Club, Atlantic City. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

In Memoriam . . . Observed a moment of silence and received a memorial resolution for Peter Sweetland, president of the Medical Inter-Insurance Exchange of New Jersey.

Report of the President . . .

(1) Optometric Drug Use (A-743) . . . Noted a letter from Philip J. Cocuzza, executive director of the Dental Association, indicating the Dental Association's support of a "no position" stance on this bill.

(2) Strategic Planning Proposals . . . Referred MSNJ's long-range goals and objectives to Doctor Costabile for referral to the appropriate councils and committees.

Report of Executive Director . . .

(1) MSNJ Paid Memberships . . . Noted MSNJ paid membership totaled 6,809 as of March 31, 1990.

(2) Financial Statements . . . Reviewed and approved the financial statements for the period ending March 31, 1990.

(3) Legislation . . . Noted the following: S-642 (Deletion of MD Requirement for Commissioner of Health) passed the Senate with a vote of 28-7; A-3359 (Requirement that All Schedule II Prescriptions Be in Triplicate), would require the Department of Health to provide every doctor with prescription pads to be used for schedule II drugs; S-2607 (Requirement that Burden of Proof in a Licensure Action Be "Clear and Convincing" Evidence), will be actively supported by MSNJ and now is out of committee.

Litigation . . . Noted the following: MSNJ versus Merin (Surcharge), scheduled for argument on June 4, 1990; PRO versus MSNJ, the judge has reserved decision; MSNJ versus State Board of Physical Therapy, pending in State Supreme Court; SBME versus Sinha, pending a decision by the Appellate Division; and No-Fault, awaiting action by MSNJ until decision by the federal court is announced.

Council on Legislation. . . Approved all the positions recommended by the Council with the exception of the following: S-1272 (Generic Substitution/Prescription Blank Change), voted to change the position to "No Action" provided the bill is amended to use the phrase brand necessary; S-2051 (Dispensing of Drugs by Physicians), voted to change the position to "No Action" and to seek certain amendments and clarification; S-613 (AIDS), voted to change the position to "Disapproved;" and A-3042 (Medicare Assignment), voted unanimously to change the position to "Active Opposition."

Council on Medical Services. . . Approved the following:

That the Council on Medical Services be authorized to test a disability form devised by Doctor William E. Ryan, and report back to the Board of Trustees.

That the Board of Trustees advise the membership of its obligation to provide information to insurance companies with the written consent of the patient, and of its right to charge a reasonable fee for this service.

Task Force on the Shortage of Nurses and Technical Personnel . . . Approved the following recommendations after deletion of the words in italics:

That MSNJ urge the Governor to support increased funding in his budget for nursing and allied health education in academic institutions and hospital settings—specifically for programs in the following fields: dietetic internship; EMT—paramedic: surgical technology; radiography; ultrasonography; nurse midwifery; nuclear medicine; respiratory therapist; respiratory technician; dental assisting; dental hygiene; physical therapy; *nursing (Master's)*; medical technology; toxicology; and cytotechnology.

That the New Jersey Hospital Association, the New Jersey State Nurses Association, and the appropriate representatives in the fields of study mentioned also be urged to contact the governor regarding funding for nursing and allied health education programs.

Unfinished Business . . .
(1) Annual Grant to the Academy of Medicine of New Jersey . . . Voted to address this issue in executive session.
(2) H.R. 3102 (Public Health Response to AIDS Act of 1989) . . . Received thank you letter from Congressman Dannemeyer for MSNJ's endorsement of this bill.
(3) Jury Trial—Driving While Intoxicated . . . Noted that the Supreme Court decided that all vehicular violations other than death by automobile are to be tried in municipal courts without juries.

New Business. . .
(1) Department of Health Regulation on Endoscopic Procedures . . . Authorized Mr. Maressa to discuss a proposed regulation (requiring an anesthesiologist to be present during endoscopic procedures when conscious intravenous sedation is used outside the operating room) with the appropriate individual at the Department of Health.
(2) Physician Assistants . . . Noted Dr. Hirsch reiterated MSNJ's continuing opposition to the recognition of physician assistants and that MSNJ expects to take part in the debate about the physician assistants pilot program.

A reorganization meeting of the Board of Trustees was held on May 9, 1990, at the Sands Hotel, Casino and Country Club, Atlantic City. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

Reorganization Meeting . . . Welcomed the following new members: Joseph A. Riggs, MD, president-elect; William E. Ryan, MD,

ARE YOU MOVING?

If so, please send a change of address to *NEW JERSEY MEDICINE,* Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648, at least six weeks before you move.

Name ______________________________

Old Address ______________________________

City ______________ State ________ Zip ________

New Address ______________________________

City ______________ State ________ Zip ________

first vice-president; and Joseph N. Micale, MD, second vice-president.

Referrals from the 1990 House of Delegates . . . Noted all the actions for the referrals from the 1990 House of Delegates are explained in the Transactions section of *NEW JERSEY MEDICINE* (August 1990, pages 674-Tr 81); this refers to Resolutions #1, #2, #3, #4, #5, #6, #9, #11, #12, #14, #15, #16, #17, #18, #19, #21, #23E, #24E, #26E, #27E, Annual Report of the Council on Mental Health, and Gender Exploitation in the Workplace.

Unfinished Business. . .
(1) Foundation of UMDNJ. . . Agreed to supply MSNJ membership mailing labels to the Foundation of UMDNJ for their use in soliciting funds.
(2) Annual Meeting Site Proposal . . . Was advised that proposals from Trump Taj Mahal Casino Resort and other hotels will be taken into consideration by the Committee on Annual Meeting in recommending a site for the 1991 MSNJ Annual Meeting.

UMDNJ NOTES

Surgeons at UMDNJ are repairing severely fractured legs without putting patients in traction, saving them up to 12 weeks of recovery time. Orthopedic surgeons at UMDNJ-Robert Wood Johnson Medical School, Camden, among a few in New Jersey who specialize in this procedure, are using a device called an interlocking femoral nail to fix the fractures internally. The device is a rod about one-half inch in diameter with two transfixing screws, one at the top and one on the bottom. To repair the fracture, the rod is installed inside the femur and then a transfixing screw is placed at each end to lock the rod in place. With this support, patients can begin putting weight on the leg the day after surgery. Without the device, a patient would spend 6 to 12 weeks in traction. Following physical therapy, the patient's total recovery time is about 3 months. In most cases, the rod is removed a year to 18 months following the operation.

The Lyme Disease Center at UMDNJ-Robert Wood Johnson Medical School is accepting patients for two studies to evaluate the relative efficacy of current drug treatment. The Center also has established a tollfree information hotline to answer questions about the disease, an increasing problem especially in the northeastern United States. The hotline number is 1-800-245-LYME and is available Monday through Friday from noon to 8 P.M. The Lyme Disease Center also conducts research to uncover the basic mechanism behind the disease and the reasons some tick victims become sick and recover, some do not get sick, and others get sick and do not recover. Callers to the Center's hotline can receive written information about the disease and referral to the Center if necessary.

Camden County dedicated a facility at its Lakeland complex in Gloucester Township to house a UMDNJ addiction-treatment and research program. Freeholder Director Robert E. Andrews, Freeholder Joseph F. Carroll, liaison for buildings and operations, and Freeholder Michael J. DiPiero, chairman of the department of health and human services, dedicated the facility. Dr. Martin Iguchi, assistant professor of psychiatry at the Center for Addiction Research, an arm of UMDNJ-School of Osteopathic Medicine, is project director. Dr. Jerome Platt is director of the Center. ☐ Stanley S. Bergen, Jr, MD

NEW MEMBERS

The Medical Society of New Jersey would like to welcome the following new members to our County and State societies:

Atlantic County
Isaac S. Mordecai, MD
Nadia Sadik, MD

Bergen County
Jose H. Duque, MD
Alberto M. Goldwaser, MD
Richard M. Grose, MD
Patricia L. Hughes, MD
Judith P. Lustig, MD
Scott B. Pomerantz, MD
Peter I. Praeger, MD
John R. Scheuch, MD
Anthony P. Volpe, MD
Sharad D. Wagle, MD
Darryl S. Weiss, MD

Burlington County
David G. Ansel, MD
Carl G. Conrad, MD
Andres T. Guevarra, MD
Dhiraj K. Panda, MD
Michael A. Wappel, MD

Camden County
Leonid Belopolsky, MD
William E. Benson, MD
Patricia M. Browne, MD
Carman A. Ciervo, DO
Neil M. Cohen, MD
Manuel R. De La Cruz, MD
Dean A. Drezner, MD
Guillermo C. Elkouss, MD
Jack Goldberg, MD
Terry A. Gubitosi, MD
Alexis Harvey, MD
Steven D. Herman, MD
Diane M. McClain, DO
Paresha S. Shah, MD
Peter G. Sperandio, MD
Coleen C. Whitman, MD

Essex County
Mark D. Chase, MD
Peirre R. Leger, MD
Janice L. Puttorak, MD

Gloucester County
Steven J. Glass, MD
William A. Ollar, DO

Hunterdon County
Cheryl A. Kennedy, MD
Stanley A. Sheft, MD

Mercer County
Robyn F. Agri, MD
John Caruso, Jr, MD
Ahmad Farzad, MD
Kathleen Gelperin, MD

Jose M. Gonzalez-Acuna, MD
Raj N. Lalla, MD
James B. Loftus, MD
Angela Merlo, MD
Scott D. Miller, MD
Jonathan R. Sachs, MD
Gary A. Smotrich, MD
Cindy P. Sussman, MD
Michael H. Yamane, MD

Middlesex County
Emelita A. Ayos, MD
Rena M. Nora, MD
Robert I. Park, MD
Frank A. Simon, MD
Heidi K. Winchman, MD

Monmouth County
Richard I. Sultan, DO

Morris County
Peter E. Bippart, MD
Michael R. Dara, MD
Elmer S. Gilo, MD
Darlene J. Goldstein, MD
Michael M. Mainero, MD
Donald H. Marks, MD
Mark W. Moritz, MD
Jeffrey C. Parker, MD
Jeanne R. Schwartz, MD
Mark S. Silidker, MD
John G. Soriano, MD

Ocean County
Frank C. Alario, MD
Richard J. Borgatti, MD
John Drulle, MD
Emilia C. Eiras, MD
Joseph J. Guarino, Jr, MD
Russell L. Harrell, MD
Sang K. Kim, MD
Rangaswamy S. Lokchander, MD
Stewart F. Miller, MD
Donato J. Santangelo, III, MD
Victor C. Tauro, MD
Iraj K. Varzi, MD
Jean C. Wang, MD
Henry K. Yu, MD

Passaic County
Elizabeth A. Boyle, DO
Michael K. Buckley, MD
Shlomo Charlap, MD
Michael A. D'Anton, III, MD
Alfred M. DiRenzo, DO
Justin F. Fernando, MD
Michael J. Flintrop, MD
Robert M. Gajdos, MD
Jonathan A. Gold, MD
Alan J. Heideman, MD
Lawrence Kraut, MD
Michael J. Martino, MD
Alexander Mittelmann, MD
Michael J. Pereira, MD
David M. Samuel, MD
Sheldon H. Teperman, MD

Somerset County
Anthony Frisoli, MD
Fikry W. Isaac, MD
Cheryl J. Rubin, MD

Sussex County
Brian F. Newman, MD
Donald J. Rubino, MD

Union County
Roger W. Countee, MD
Steven L. Gerber, MD
Christopher J. Minas, MD
Barry J. Pollack, MD
Israel F. Rebarber, MD
Amir Salomon, MD

PLACEMENT FILE

The following physicians have written to the MSNJ executive offices seeking information on possible opportunities for practice in New Jersey. The information listed below has been supplied by the physicians. If you are interested in any further information, we suggest you make inquiries directly to the physicians.

INTERNAL MEDICINE

Marc Kesselhaut, MD, 1 Rustic Ridge, C16, Little Falls, NJ 07424. St. George's University 1986. Board eligible. Solo or partnership in Mercer, Somerset, Burlington, Hunterdon, or Middlesex counties. Available September 1990.

Suresh Reddy, MD, 3301 Cobblestone Cir., #6, Waterloo, IA 50703. Kakatiya (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

NUCLEAR MEDICINE

Haresh P. Solanki, MD, 3 West Elm St., Islip, NY 11751. MP Shah Medical College (Iran) 1980. Board eligible. Group or hospital-based.

PHYSICAL MEDICINE AND REHABILITATION

Robert B. Thorne, MD, 112 Woodside Ave., Trenton, NJ 08618. Rutgers 1980. Board certified. Part time or full time. Available.

SPECIAL ISSUE

Lyme Disease In New Jersey

Additional copies will be available for $6.50

NEW JERSEY MEDICINE
Two Princess Road
Lawrenceville, NJ 08648

PHILADELPHIA HEART INSTITUTE

Presbyterian Medical Center
39th and Market Streets
Philadelphia, PA 19104

FIRST ANNUAL SYMPOSIUM

Cardiovascular Disease

State-Of-The-Art 1990

12-13 October 1990
The Rittenhouse Hotel
Philadelphia, Pennsylvania

This two-day symposium is designed to give the physician with a busy clinical practice the opportunity to review the field with experts renowned for their contributions to the field. Presentations will focus on the most recent advances in the medical, non-surgical and surgical management of coronary and valvular heart diseases and in the use of state-of-the-art diagnostic procedures.

Course Director, Ami E. Iskandrian, M.D.

Highlights of the Symposium include:

- ❤ The Unstable Plaque: Medical Therapy and PTCA
- ❤ Expanding Application of Nuclear Cardiology
- ❤ New Techniques of Non-Surgical Revascularization
- ❤ Left Ventricular Remodelling after Acute Myocardial Infarction
- ❤ Optimal Use of Quantitative Doppler Echocardiography
- ❤ The Risk-Benefit Dilemma of Antiarrhythmic Therapy

- ■ 44 CME Credits
- ■ Reservations Limited to 200
- ■ Contact: Ms. Deborah Wal (215) 662-9084

Co-Sponsored by
The Southeastern Pennsylvania
Affiliate of
The American Heart Association

CONTINUING EDUCATION

ALLERGY

October

19 **General Allergy**
1-2 P.M.—North Princeton Developmental Center, Princeton
(AMNJ)

25-28 **In Vitro Allergy Seminar**
Myrtle Beach, Martinique
(Holy Name Hospital)

ANESTHESIOLOGY

September

18 **Meeting**
6-9 P.M.—Ramada Inn, Clark
(New Jersey State Society of Anesthesiologists)

22 **Tenth Annual Clinical Anesthesia**
8 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

CARDIOLOGY

September

19 **Indications for Invasive Studies**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

DERMATOLOGY

October

10 **Common Tumors of the Skin**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

INFECTIOUS DISEASE

September

5 **AIDS Training and Resource Program for Hospital Health Educators**
2-3 P.M.—John E. Runnells Hospital, Berkeley Heights
(AMNJ and NJDOH)

11 **Counseling and Testing for HIV Infection**
11:30 A.M.-1 P.M.—UMDNJ-University Hospital, Newark
(AMNJ and NJDOH)

14 **AIDS Training and Resource Program for Hospital Health Educators**
9:30-11:30 A.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ and NJDOH)

17 **Counseling and Testing for HIV Infection**
10-11 A.M.—Hackensack Medical Center, Hackensack
(AMNJ and NJDOH)

20 **Using Counseling and Testing as a Management Strategy for the HIV-Infected Individual**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ and NJDOH)

24 **Clinical Management of HIV Infection**
10-11 A.M.—Hackensack Medical Center, Hackensack
(AMNJ and NJDOH)

26 **AIDS Training and Resource Program for Hospital Health Educators**
9-10 A.M.—Hackensack Medical Center, Hackensack
(AMNJ and NJDOH)

27 **AIDS Training and Resource Program for Hospital Health Educators**
9:15-10:15 A.M.—Saint Michael's Medical Center, Newark
(AMNJ and NJDOH)

October

4 **Counseling and Testing for HIV Infection**
11:45 A.M.-1 P.M.—John F. Kennedy Medical Center, Edison
(AMNJ and NJDOH)

10 **Using Counseling and Testing as a Management Strategy for the HIV-Infected Individual**
9:30-10:30 A.M.—Bergen Pines County Hospital, Paramus
(AMNJ and NJDOH)

11 **Using Counseling and Testing as a Management Strategy for the HIV-Infected Individual**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ and NJDOH)

11 **Clinical Management of HIV Infection**
11:45 A.M.-1 P.M.—John F. Kennedy Medical Center, Edison
(AMNJ and NJDOH)

17 **Diagnosis and Treatment of HIV Infection**
8-9 A.M.—Barnert Hospital, Paterson
(AMNJ and NJDOH)

17 **Clinical Management of HIV Infection**
9-10 A.M.—Raritan Valley Community College
(AMNJ and NJDOH)

MEDICINE

September

4 **Grand Rounds**
11 8:30-10 A.M.—Elizabeth General
18 Medical Center, Elizabeth
25 *(Elizabeth General Medical Center)*

5 **Proper Use of Antibiotics**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

7 **Modern Surgical Treatment of Peptic Ulcer Disease**
7:30-8:30 A.M.—Freehold Area Hospital, Freehold
(AMNJ)

9 **Developments in Emergency Care**
7-8 P.M.—Wallkill Valley General Hospital, Sussex
(AMNJ)

10 **Hepatitis**
7-8 P.M.—Wallkill Valley General Hospital, Sussex
(AMNJ)

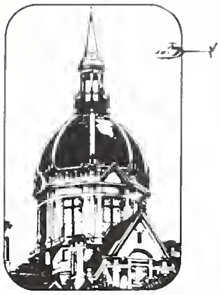
11 **Topics in Public Health**
25 12:15-1:30 P.M.—John Fitch Plaza, Trenton
(AMNJ)

12 **Living Wills**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

12 **New Practice Program**
8 A.M.-3:30 P.M.—MSNJ, Two Princess Road, Lawrenceville
(MIIENJ)

The Johns Hopkins University School of Medicine
Department of Emergency Medicine

presents



Third Annual
Written Boards in Emergency Medicine:
A Comprehensive Review

October 27 - November 2, 1990

Baltimore, Maryland

This seven day program is designed to provide a **comprehensive review** of the fund of knowledge necessary to **enable successful completion of the certification examinations** offered by the American Board of Emergency Medicine (ABEM). The official complete schedule of examination dates is available from the ABEM. Candidates for whom this course may be most helpful are those scheduled for: written recertification examination on November 4, 1990, written initial certifying examination on November 5, 1990, or the oral initial certifying examination on January 27-30, 1991. This course is recommended for both the established physician-in-practice and the physician who has recently completed residency training. It is anticipated that course participants will be near completion of a self-directed plan of study. Some written board candidates have chosen to begin their plan of study a year in advance by taking this course, others appreciate a **structured** and **systematic review** just **days prior to the written certifying exam.**

Our **curriculum** is designed based primarily on the "core content" in Emergency Medicine which was developed jointly by the American Board of Emergency Medicine and the American College of Emergency Physicians. **Allocation of lecture time** for specific areas has been determined by the relative weight of content areas as delineated by the ABEM for examination purposes. The program **objectives** are to enable registrants to: review and reinforce the **organization and comprehension of the essentials** of the core curriculum in Emergency Medicine, **refine test taking skills**, gain the psychological edge to be at your 'peak performance' on the examination day, and enhance your clinical skills for improved patient care.

The response to our course offering in the past has been most gratifying. **We** have **listened to** the **feedback** provided by prior registrants and course faculty, and this led to several new features. This year we will include a formal didactic session on preparation for the oral exam. Additionally, **elective** opportunity for private **oral board preparatory tutorials** and **small group oral board simulation** will be available during the program. The underlying philosophy of our program is unchanged and our primary focus will remain the written board exam candidate. There are many resources from which to learn the information suggested by the core content curriculum. Among them are Rosen's Textbook of Emergency Medicine, the ATLS/ACLS manuals and numerous other texts, monographs and journals. This year we have chosen to present the core content information in a format that correlates organizationally with the text, Emergency Medicine: A Comprehensive Study Guide - American College of Emergency Physicians, edited by Tintinalli, Krome and Ruiz. Finally, we have added a three component special session which will provide practical suggestions and strategies on **how to achieve optimal performance on your examination day.**

A variety of **instructional formats** are utilized which will allow each registrant to gain the most from this program. **Formal lectures**, a comprehensive **'syllabook'** (which is mailed to you in advance), a total of over 1000 single answer multiple choice **"pretests questions"** for self assessment purposes administered prior to each half day lecture session, **self teaching laboratory** which is open 14 hours daily, **faculty panel** question/answer **discussions** following each half day session, **x-ray view box displays**, **PEER IV review sessions**, and **elective oral board practice/tutorial sessions** will be available for enhancement of your preparation.

The **teaching faculty** consists exclusively of emergency medicine physicians who have taken the written board and are noted for their interest and expertise in teaching. We are fortunate to have retained almost all of the best received 1989 faculty and several outstanding additional faculty members from community practices, academic institutions throughout the country and the Johns Hopkins Medical Institutions.

Registration will be limited. Plan now to join us in the fall.

GUEST FACULTY

James L. Baker, MD, MPH, FACEP
Edward Balgiano, MD, FACEP
Robert A. Barish, MD, FACEP
Georges C. Benjamin, MD, FACEP, FACP
Edmund Bolton, MD, FACEP
Brian Browne, MD, FACEP
Dominick Catalano, MD, FACEP
Richard Edlich, MD, PhD
Randy S. Ellis, MD, FACEP
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Charles A. Garfield, PhD.
Keith T. Ghezzi, MD
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Keith T. Sivertson, MD, FACEP
Director, Department of
Emergency Medicine

Carol Jack Scott, MD, MSEd, FACEP
Program Director

For Further Program Information: Office of Continuing Education, The Johns Hopkins Medical Institutions
Turner 20, 720 Rutland Avenue, Baltimore, Maryland 21205-2195, (301) 955-2959

27 **Chronic Pain Management and Issues Related to Iatrogenic Addiction**
8-9 P.M.—Freehold Area, Hospital,
Freehold
(AMNJ)

October

2 **Grand Rounds**
9 8:30-10 A.M.—Elizabeth General
16 Medical Center, Elizabeth
23 *(Elizabeth General*
30 *Medical Center)*

3 **Aminoglycosides**
9-10 A.M.—Warren Hospital,
Phillipsburg
(AMNJ)

3 **Prevention of Lower Extremity Amputations**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

3 **Diagnosis and Treatment of Neuroleptic Malignant Syndrome**
1:30-2:30 P.M.—Essex County
Hospital Center, Cedar Grove
(AMNJ)

9 **Prevention of Lower Extremity Amputations**
8-9 A.M.—Barnert Hospital,
Paterson
(AMNJ)

9 **Topics in Public Health**
23 12:15-1:30 P.M.—John Fitch
Plaza, Trenton
(AMNJ and NJDOH)

11 **Diabetic Nephropathy**
1:30-2:30 P.M.—Vineland
Developmental Center, Vineland
(AMNJ)

13 **Late Effects of Polio**
8 A.M.-3:30 P.M.—Somerset
Marriott Hotel, Somerville
(Raritan Valley Post Polio Support Group)

14 **Diabetic Nephropathy**
1:30-2:30 P.M.—Roosevelt
Hospital, Metuchen
(AMNJ)

15 **Meeting**
6:30 P.M.—The Manor, West
Orange
(Neurological Association of New Jersey/Neurology Section, AMNJ)

16 **Citrate and Nephrolithiasis**
Overlook Hospital, Summit
(Nephrology Society of New Jersey)

17 **Chronic Pain Management and Issues Related to Iatrogenic Addiction**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

17 **Prevention of Lower Extremity Amputations**
1-2 P.M.—V.A. Medical Center,
Lyons
(AMNJ)

20 **New Practice Program**
8 A.M.-3:30 P.M.—Medical
Society of New Jersey,
Lawrenceville
(MIIENJ)

OBSTETRICS/GYNECOLOGY

September

10 **Diabetes in Pregnancy**
12 Noon-1 P.M.—Warren
Hospital, Phillipsburg
(AMNJ)

12 **Diabetes in Pregnancy**
2-3 P.M.—Welkind Rehabilitation
Hospital, Chester
(AMNJ)

October

2 **Diabetes in Pregnancy**
8-10 A.M.—Barnert Hospital,
Paterson
(AMNJ)

16 **Diabetes in Pregnancy**
8-9 A.M.—Underwood Memorial
Hospital, Woodbury
(AMNJ)

18 **Neonatal Problems**
7:30-8:30 P.M.—Freehold Area
Hospital, Freehold
(AMNJ)

20 **Hypertensive Disease in Pregnancy**
9 A.M.-4:30 P.M.—Saddle Brook
Marriott, Saddle Brook
(Seton Hall University Graduate School of Medical Education)

ONCOLOGY

September

13 **Tumor Board Case Presentation**
9-10 A.M.—Irvington General
Hospital, Irvington
(Irvington General Hospital)

ORTHOPEDICS

October

26- **15th Annual New Jersey**
27 **Orthopaedic Symposium in Conjunction with the 23rd Annual Northeastern Mid-Atlantic Orthopaedic Residents' Conference**
3:15 P.M.—Hyatt Regency Hotel,
New Brunswick
(AMNJ and NJ Orthopaedic Society)

PSYCHIATRY

September

4 **Psychiatry Grand Rounds**
11 8:30-10 A.M.—Elizabeth General
18 Medical Center, Elizabeth
25 *(Elizabeth General*
Medical Center)

5 **Mitral Valve Prolapse in Eating and Panic Disorders**
1:30-2:30 P.M.—Essex County
Hospital Center, Cedar Grove
(AMNJ)

6 **Computerized EEGs—Role in Clinic Psychiatry**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

13 **HIV Spectrum Disorder: Counseling, Psychotherapy, and Pharmacotherapy**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

20 **Premenstrual Syndrome: Diagnosis and Treatment**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

26 **Velvet and Armour**
All day—Carrier Foundation,
Belle Mead
(Carrier Foundation)

26 **Obsessive Compulsive Disorder**
12 Noon-1 P.M.—Trenton
Psychiatric Hospital, Trenton
(Trenton Psychiatric Hospital)

October

2 **Psychiatry Grand Rounds**
9 8:30-10 A.M.—Elizabeth General
16 Medical Center, Elizabeth
23 *(Elizabeth General*
30 *Medical Center)*

4 **Biological Origins of Alcoholism**
12 Noon-1 P.M.—Carrier
Foundation, Belle Mead
(Carrier Foundation)

5 **Annual Fall Meeting**
6:30 P.M.—Hyatt Regency,
New Brunswick
(NJ Psychiatric Association)

25 **Early Office Recognition of Depression Relating to Patient Management**
12 Noon—1 P.M.—Freehold Area
Hospital, Freehold
(AMNJ)

RADIOLOGY

September

13 **Radiology Meeting**
7:30-9:30 P.M.—Saint Barnabas
Medical Center, Livingston
(Radiological Society of NJ)

October

20 **MRI Seminar**
8 A.M.-5 P.M.—Hyatt Regency,
New Brunswick
(Radiological Society of NJ)

PHILADELPHIA HEART INSTITUTE
of Presbyterian Medical Center

Cardiology Update

designed for the physician and provides an intensive survey of the current status of clinical cardiology. . .

1990–91

Moderators

Leonard N. Horowitz, M.D.
Ami E. Iskandrian, M.D.
Bernard L. Segal, M.D.
William J. Untereker, M.D.

5 September – Bedside Diagnosis of the Cardiac Patient (with stethophones)
3 October – The Electrocardiogram (ECG slides discussed)
7 November – Recent Advances in the Treatement of Acute Mycardial Infarction
5 December – Angina Pectoris
9 January – Stroke: Diagnosis and Management in the 1990's
6 February – Hypertension: 1990's
6 March – Women and Heart Disease
3 April – The Sudden Death Crisis in America
1 May – Geriatric Cardiology

- Wednesdays, 3:00 – 5:00 p.m.
- Case Presentations
- Reception Following Session
- CME Credits
- No Registration Fee
- Reservations: (215) 662-8627

Scheie Auditorium
Presbyterian Medical Center
39th & Market Streets
Philadelphia, Pennsylvania 19104

The 1990-1991 MSNJ Board of Trustees

(seated, left to right): Bernard Robins, MD; Gerald H. Rozan, MD; Leticia V. DeCastro, MD; Joseph N. Micale, MD; Paul J. Hirsch, MD; Douglas M. Costabile, MD; Joseph A. Riggs, MD; William E. Ryan, MD; (standing, left to right): Carl Restivo, Jr, MD; John J. Pastore, MD; G. Gerson Grodberg, MD; Edwin W. Messey, MD; Fred M. Palace, MD; Philip J. Jasper, MD; Shah M. Chaudhry, MD; Joel S. Cherashore, MD; Angelo S. Agro, MD; George T. Hare, MD; and George J. Neumaier, MD. Missing: Anthony P. Caggiano, Jr, MD; Michael M. Heeg, MD; Louis L. Keeler, MD; R. Gregory Sachs, MD; and Robert Schnitzlein.

MSNJ ANNUAL MEETING

Karen Morrone, Sandoz pharmaceutical representative, presents the 1990 National Medical Journalism Special Award to *NEW JERSEY MEDICINE* Editor-in-Chief, Howard D. Slobodien, MD.

James Davis, MD, past-president of the American Medical Association, addresses the MSNJ House of Delegates.

Christine Grant, MD, discusses the current activities of the New Jersey State Department of Health.

Anthony P. Caggiano, Jr, MD, a new member of the MSNJ Board of Trustees, attends the House of Delegates.

Leticia V. DeCastro, MD, a new member of the MSNJ Board of Trustees, prepares for the House of Delegates meeting.

Paul J. Hirsch, MD (right), presents the presidential plaque and certificate to incoming president Douglas M. Costabile, MD (left), at the House of Delegates.

Newly elected president Douglas M. Costabile, MD, and friends (left to right), Joanne Summa, Ruth Meininger, Irene Rosenthal, and Andrea Donelan, welcome guests.

Palma E. Formica, MD (right), immediate past-president, honors Paul J. Hirsch, MD (left), with the presidential gavel.

Enjoying his inaugural dinner-dance, President Douglas Costabile, MD (standing), greets family and friends.

John B. McGinty, MD, president of the American Academy of Orthopedic Surgeons, addresses the MSNJ House of Delegates.

Donald Holtzman, MD (left), chairman of the Committee on Annual Meeting, presents a gift to Mrs. Jane Lorber, the new MSNJ Auxiliary president.

MSNJ President-Elect Joseph A. Riggs, MD, addresses the House of Delegates at the Annual Meeting.

William E. Ryan, MD, first vice-president, presents his ideas to the MSNJ House of Delegates.

Joel S. Cherashore, MD, a member of the MSNJ Board of Trustees, comments on his new role as AMA alternate delegate.

Second vice-president, Joseph N. Micale, MD, greets attendees of the MSNJ Annual Meeting.

A. Ralph Kristeller, MD, acknowledges his new position: AMA alternate delegate.

MSNJ ANNUAL MEETING

Michael H. Bernstein, MD, chairs Reference Committee B at the MSNJ Annual Meeting.

Paul J. Hirsch, MD (left), presents a Golden Merit Award to one of the recipients of this honor at the MSNJ Annual Meeting.

Elected to the Council on Membership Services, Donald J. Cinotti, MD, addresses the members of MSNJ.

Douglas M. Costabile, MD, visits the Exhibit Hall at the MSNJ Annual Meeting.

Frank L. Redo, MD, offers his thoughts after being elected a member of the Committee on Finance and Budget.

The general medical session, "Identification and Management of Asymptomatic HIV-Infected Persons in New Jersey," concludes the MSNJ Annual Meeting.

The officers of the MSNJ Auxiliary: (seated left to right): Jean Taboada, president-elect; Jane Lorber, president; Joan Gering, vice-president; Dorothy Espinola, recording secretary; (standing, left to right): Dorothy Praiss, corresponding secretary; Marion Geib, treasurer; and Chris Kline, director.

Officers (seated) and presidents of the MSNJ Auxiliary county medical societies gather at the MSNJ Annual Meeting.

EDITORIAL CRITERIA

NEW JERSEY MEDICINE is the official organ of the Medical Society of New Jersey. All material published is copyrighted by the Medical Society of New Jersey.

Content. The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports; review articles; clinical notes; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and opinions. Editorials are prepared by the editor and by guest contributors on timely and relevant subjects. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevant to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made to an audience in New Jersey.

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Specifications. Submit two manuscripts that must be typewritten and double-spaced on 8½" by 11" paper. Statistical methods should be identified.

Authors are asked to seek clarity, accuracy, and originality; attention to details of grammar, spelling, and typing are important.

The title page should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests and correspondence should be sent.

The author should submit a 30-word abstract.

Illustrations should be professional quality, black-and-white glossy prints. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission must be submitted.

Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

References should not exceed 35 citations except in review articles, and should be cited consecutively by numbers in parentheses at the end of the sentence. The reference list should be typewritten and double-spaced on separate 8½" by 11" sheets in numerical order. The style of *NEW JERSEY MEDICINE* for references is that of *Index Medicus:*

1. Goldwyn RM: Subcutaneous mastectomy. *NJ MED* 74:1050-1052, 1977.
2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

Publication Policy. Receipt of each manuscript will be acknowledged; the paper will be referred to the Editorial Board. The final decision is reserved for the editor. No direct contact beween the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. Galley proofs will be submitted to the author for correction.

Reprint Orders. Reprints may be ordered after the author is notified that the article has been selected for a specific issue. A check for the cost of reprints must accompany that order.

Communications. All communications should be sent to the editor, *NEW JERSEY MEDICINE,* MSNJ, 2 Princess Road, Lawrenceville, NJ 08648.

1990 TRANSACTIONS
Medical Society of New Jersey

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1989 Transactions

The House of Delegates approved the Transactions of the 1989 Annual Meeting, as published in ***NEW JERSEY MEDICINE.***

Action To Limit Debate

The House of Delegates agreed, upon motion, that no one may speak more than once on any given subject except in rebuttal or by express permission of the House, and that floor time in each instance shall be limited to four minutes unless exception is made by the House.

Reports and Resolutions

Reports and resolutions and the actions, thereon, are included under the Reference Committee to which they were assigned. The House takes action only on the resolved sections of a resolution.

MSNJ Appointments

Speaker: **Karl T. Franzoni, MD, Mercer**
Vice-Speaker: **Edward A. Schauer, MD, Monmouth**
Chief Sergeant-at-Arms: **Charles J. Zwerling, MD, Monmouth**
Sergeants-at-Arms: **Anthony G. Barbara, MD, Bergen;**
  Leticia V. DeCastro, MD, Middlesex; Frank L. Redo, MD, Salem;
  Robert I. Salasin, MD, Cape May
Chief Teller: **George T. Hare, MD, Camden**

President/Chairman of the Board of Trustees

PAUL J. HIRSCH, MD

(Reference Committee "A")

During the past year, the Medical Society of New Jersey has continued to vigorously pursue the interests of our membership, and the interests of our patients. Our highest priority always has been, and will continue to be, to maintain high quality and accessible care for the citizens of New Jersey.

Crisis in Health Care. The number of patients in New Jersey with AIDS continues to climb tragically. Our Task Force on AIDS continues to grapple with the important and sensitive issues that arise from this awful disease. We believe that our Legislature, and the citizens of our state, do not understand the immensity of the tragedy that awaits us, in terms of loss of life, human suffering, and economic costs. Only partially related to the AIDS epidemic is the shortage of nursing and other health care workers. We will continue to deal with this problem, and to evaluate potential solutions, through our Task Force on the Shortage of Nurses and Technical Personnel. Similarly, there is a shortage of physicians to treat AIDS patients, and some other disadvantaged patient groups. In part, this relates to the lack of funding for medical care for these groups, thereby depriving some patients of accessible medical care. Our Task Force on Patient Care for the Under-Insured is developing strategies to deal with this situation. Over the past several years, our Committee on Environmental Health has become a respected voice among those concerned about the destruction that man may wreak on the land, the water, and the air we breathe.

Legislative/Regulatory Activity. We cannot escape the fact that governmental activity now impacts more strongly on the quality of care and the availability of care, than all other factors combined. The Medical Society of New Jersey has continued to increase its participation in the legislative and regulatory processes, on behalf of our profession and our patients.

We have learned to focus our legislative efforts in a few areas of highest priorities, and yet maintain the flexibility to deal with "emergency" situations. Your Board has identified areas of priority as guidelines for leadership during the next year.

During this past year, we have been particularly pleased with our success in the Legislature, markedly reducing the medical waste regulation fee (for most physicians, lowered from $528 to $100); and of the success of the Codey legislation (S-2936) for physician licensure reform. Although we were pleased to succeed with virtually all of our goals for this legislation, we will continue to pursue additional improvements in the law.

The Executive Committee of the Board of Trustees went to Washington last fall, and met with several of our congressmen, and with the health aides of every senator and congressman from New Jersey. We also held a Board legislative seminar, attended by leaders from the New Jersey Legislature. We have maintained close and frequent contact with our state and federal legislators, at many intervals during the year. During the gubernatorial campaign, the leadership of the Board of Trustees met with both candidates and their staffs. Similar and additional contacts will be continued as part of our ongoing program of participating in the formation of public policy affecting the health of our patients.

Litigation. The Board of Trustees recognizes that litigation is a last resort, always with an uncertain outcome. But, we have learned that we must not hesitate to use this mechanism when it is necessary to protect the rights of the physicians of New Jersey. We have continued to litigate against the insurance commissioner, with regard to the professional liability surcharge. Our initial efforts resulted in a 50 percent decrease in this surcharge for most of our members; but we will not rest until we have eliminated this unwarranted, unfair, and unreasonable tax.

We have continued our litigation against the State Board of Physical Therapy, to prevent the expansion of physical therapists into areas for which their education does not prepare them. We have won this battle in the lower courts, and continue with it at the Supreme Court level.

We are involved with ongoing litigation with the PRO, to protect the full rights of our membership to legal counsel and legal representation at all stages of inquiry by the PRO.

"Your Insurance Company." One of the most important and far-reaching actions of the Medical Society of New Jersey in recent memory was the formation of a professional liability insurance company, to provide coverage for our members, and for other New Jersey physicians. The Medical Inter-Insurance Exchange of New Jersey (MIIENJ), and its "management company," the New Jersey State Medical Underwriters (NJSMU), have provided responsible professional liability coverage since their inception. During the past year, MIIENJ has returned an 11 percent refund on the 1978 premium year, to those who were insured at that time. And, application has been made to the Department of Insurance to begin to return the nonrecourse loans.

The Board of Trustees of the Medical Society of New Jersey remains keenly aware of its responsibilities and obligations (on behalf of our membership) to maintain a high-quality management team for "our insurance company" and to ensure the very best possible coverage, at the lowest price, to our members.

In 1989, six MIIENJ lawsuits resulted in adverse verdicts that exceeded $1 million. While the company is well positioned to meet such challenges, several members of the Board of Directors and the Board of Governors agreed that it was time to re-evaluate MIIENJ's claim management approach and activities. A special study through the consulting firm of Tillinghast was conducted. The consultants performed a thorough review, and presented their findings and recommendations to the Board of Directors. Tillinghast concluded that top priority should be given to a search for the president's position vacated by Peter Sweetland's retirement due to illness; that has begun. The study team also recommended revised policies for claim management, improved strategies, utilization of attorneys and experts, and several proposals to enhance performance and evaluation. Additionally, the study offers several proposals for increasing management and Board oversight to ensure proper control of claim management.

We intend to deal honestly and forthrightly with the recent Tillinghast consultation report, to the betterment and improvement of service to our members, and all insureds. In order to add to the strength of the company, and of the relationship, the Board of Trustees has added five new members to the Board of Directors of NJSMU.

Strategic Planning. We have initiated a process of long-range and strategic planning for the Medical Society of New Jersey, including a Board of Trustees retreat. We believe this process will provide continuity and consistency, as well as programming for change and maintaining our options to meet the challenges and opportunities of the future.

Medicare/Pennsylvania Blue Shield (PBS). For more than a year, the Medical Society of New Jersey has had ongoing meetings with Pennsylvania Blue Shield and the Health Care Financing Administration (HCFA) to iron out difficulties between PBS and physicians. Representatives from PBS generally attend the monthly meetings of the MSNJ Board of Trustees.

The ICD-9 coding problems improved dramatically when PBS agreed to send a notice to all physicians, with specific instructions regarding correlation of the procedure code and the diagnosis code. With regard to global billing, PBS agreed to reimburse for consultations following a procedure, if this were legitimately a separate event; all prior claims were reprocessed without the need for additional action on the part of the physician.

An additional problem arose with the need to enter the referring physician's provider identification number, and PBS was not willing to issue the numbers to all physicians. This was brought to HCFA at the insistence of MSNJ; after some months, PBS prepared a directory listing all physician Medicare provider numbers, and sent this to all New Jersey physicians.

When Pennsylvania Blue Shield announced it would discontinue its 800 number for physicians calling PBS, complaints by MSNJ led to the indefinite continuation of this service.

An important remaining issue is the assistant at surgery. PBS and HCFA have remained adamant on this issue. We are hopeful that this issue can be resolved after review by the State Board of Medical Examiners.

Physician Unity. Our successes depend upon the unity of the physician community of New Jersey. The Medical Society of New Jersey is the appropriate organization for physician unity in New Jersey.

During the past year we have provided a seat at our Board of Trustees for a representative of the New Jersey Association of Medical Specialty Societies and for a representative from the New Jersey Hospital Medical Staff Section. We believe this has provided an additional voice for other physician groups, and has strengthened your Medical Society. But, further and more formal steps also must be taken in the future, to ensure our progress toward the goal of physician unity.

Communication. One of our most important priorities has been to continue to improve communication with our members. Frequent and effective communication in both directions is necessary for the success of all of our other programs. During the past year, we have increased the use of the "MSNJ Hotline," for fast communication of important events. The "Capitol Commentary," a part of *NEW JERSEY MEDICINE,* now is sent separately so that you receive this information earlier, and in an easily readable format. A new first page ("Newswatch") has been added to *NEW JERSEY MEDICINE,* with a "closing date" of only five days before publication, to additionally bring to you the latest information in all areas.

We also communicated with the leadership of the New Jersey medical community, at the Conference of Presidents, in November 1989. This meeting provided an update for your leadership, regarding legislation, regulation, litigation, Medicare, and other topics of importance. This was successful and well received; it will be continued, with consideration given to increasing the frequency to twice each year (September and January).

Further communication occurs with attendance at your local meetings. All recent presidents of the Medical Society of New Jersey have been eager to attend county medical society meetings when invited. This is an opportunity for your leadership to discuss the activities of the Society and, more important, to hear what the membership has to say. The president of the Society, and all members of the Board of Trustees, are available at your request. It is an essential aspect of our two-way communication.

The Board of Trustees is particularly proud of the communication that exists each month, at our open Board meetings. These meetings are open to every member of the Medical Society of New Jersey. Any member may comment on any issue or item before the Board. Any member may request that an item be placed on our agenda. Individual members can, and frequently do, affect and change the decision-making process. Attendance at these meetings is the very best means of all of staying informed about the issues that affect your practice and having direct input on the decisions made by your Board.

Conclusion. To review any year in the course of our Medical Society is to review but a small segment of a continuum of an ongoing process guided by your elected representatives on the Board of Trustees. I personally am grateful for having had the opportunity to work with the dedicated and hardworking members of this Board, and I appreciate their commitment to our Society, and their concern for the quality of medical care in New Jersey.

[redacted]

The Reference Committee recommended that the report be filed.
HOUSE ACTION: Adopted. The report was filed.

Judicial Council

PAUL H. STEEL, MD, CHAIRMAN

(Reference Committee "A")

From official findings, the Judicial Council presents a summary of its operations and those of county judicial committees for the period March 1989 through May 1990.

By Judicial Committees

Complaints reported as disposed of	80
Alleging:	
Dissatisfaction concerning fees	40
Dissatisfaction concerning medical procedures	15
Unprofessional conduct	10
Dissatisfaction concerning professional ethics	15

By Judicial Council

Meetings held	2
Official communications acted upon	125
Appeal hearings requested	1
Appeal hearings granted	1
Formal opinions revised (Opinion #14)	1

Interest Charges. Revised February 16, 1990. A physician who has experienced problems with delinquent accounts may properly choose to add interest or other reasonable billing charges to delinquent accounts. The patient must be notified in advance of the interest or service charges by means of posting a notice in the waiting room, the distribution of leaflets in the office, and appropriate notations on billing statements. The physician must comply with state law that limits interest to the rate approved by the State Supreme Court. The rates may be obtained by calling the State Division of Investment (609/984-4187). The approved rate changes annually. The rate until June 1990 is 8 percent. Physicians are encouraged to make exceptions in hardship cases. The Council does not believe it is appropriate to add attorneys fees, court costs, or collection costs to the amount owed.

A number of inquiries have been received concerning the appropriateness of forwarding third-party fee complaints to specialty societies for their consideration.

For information to the membership, Opinion #11 adopted by the Judicial Council on October 14, 1981, and reissued on August 5, 1987, is presented in full and made a part of its 1990 Annual Report as follows:

Propriety of judicial committees forwarding third-party fee complaints to specialty societies for their consideration. The Bergen County Medical Society has questioned whether it is appropriate to forward third-party fee complaints to specialty societies for their consideration. The question also was raised regarding an administrative review fee by the specialty societies.

The Council recognizes that fee questions can sometimes require referral to a specialty society. It is, indeed, appropriate for a judicial committee to refer such a question for expert opinion or advice, bearing in mind that the judicial committee is to make the final determination.

If the specialty society requires that a modest administrative fee, i.e. $25 to $50 be paid by the third party, the Council views that situation as being within reasonable bounds.

The Reference Committee recommended that the report be filed.
HOUSE ACTION: Adopted. The report was filed.

AMA Delegation

KARL T. FRANZONI, MD, CHAIRMAN

(Reference Committee "A")

The composition of the AMA House of Delegates now totals 435 delegates.

The agenda dealt with by the House continues to expand and broaden. The issues that require attention, debate, resolution, and policy pronouncements sometimes appear limitless.

In response to the question, "What does the AMA do for me?" the following accomplishments are worth citing:

1) The defeat of mandatory assignment four times in the past three Congresses.

2) The fact that the AMA is the world's largest publisher of scientific information.

3) The defeat of expenditure targets in the budget bill.

4) The AMA's commitments to National Institutes of Health funding to protect the stability and integrity of medical research in the United States.

5) The AMA's considerable activities in communicating medicine's story to the public including: weekly news releases to 3,000 reporters, meetings with editorial boards, American medical television reaching over 50,000 physicians and 800,000 lay people each month, and American medical radio news used by 500 radio stations daily.

The AMA represents the national spokesperson of our revered profession. All of us should commit to the active recruitment of our confreres who currently are not AMA members.

MSNJ RESOLUTIONS BEFORE AMA HOUSE OF DELEGATES

The following deals with resolutions introduced by the Medical Society of New Jersey in the AMA House of Delegates.

1. **Sexual Exploitation.** The resolution introduced by the New Jersey Delegation asked for reaffirmation by the AMA that sexual exploitation in teaching and other professional relationships is unethical and unprofessional.

Although the resolution was not adopted, Report B of the AMA Council on Ethical and Judicial Affairs was adopted in its place.

Report B of the Council on Ethical and Judicial Affairs defined sexual harassment as it may occur in medical training programs, and recommended that all medical training programs have a policy on sexual harassment and consensual sexual relationships, and that a grievance procedure should be in place to protect the rights of both trainees and educators.

2. **Removal of Discriminatory or Biased Provisions Toward Nonparticipating Physicians.** The resolution introduced by the New Jersey Delegation urged that the AMA petition Congress, the Health Care Financing Administration (HCFA), and Part B carriers to remove all factors that discriminate against nonparticipating physicians in Medicare; and further, that the AMA petition Congress, HCFA, and Part B carriers to ensure that explanation of benefits to beneficiaries states nothing more than the reimbursement allowed for medical services.

The House adopted a substitute resolution submitted by the reference committee that asked that the AMA seek to remove, on the Explanation of Medicare Benefits sent to the patients of Medicare nonparticipating physicians, all statements regarding the participation status of the physician and the alleged benefits associated with the assignment of claims from seeing participating physicians.

In addition to lobbying key committee members and staff, a letter was sent to U.S. Representative Butler Derrick (South Carolina) supporting his draft bill to repeal the participating program.

3. **Mandatory Medicare Assignment or Determination of Fee Levels.** The resolution proposed by the New Jersey Delegation asked the AMA to petition Congress to mandate that no state be allowed to legislate that physicians' acceptance of Medicare assignment or the Medicare allowance of reimbursement be a condition of medical licensure.

The Reference Committee offered a substitute resolution asking that the AMA vigorously oppose any federal legislation that would mandate Medicare assignment; and that the AMA seek federal legislation that would prohibit states from enacting legislation to require that acceptance of Medicare assignment or the Medicare allowance of reimbursement be a condition of medical licensure, or used in determinations of unprofessional conduct, or made effectively mandatory in any other fashion.

The first section of the substitute resolution was referred to the Board of Trustees and is under consideration and study. The second portion of the substitute resolution was adopted.

In addition to lobbying key committee members and staff, the AMA Council on Legislation drafted, and the Board of Trustees approved, a bill to implement the second resolve.

4. **Inadvisability of Medicare Participation.** This resolution called on the AMA to petition Congress to end the Medicare participation program, to oppose discriminatory policies aimed at Medicare "nonparticipants," and to support the right of every physician to make his own judgment regarding the participation program.

Medicare Participation

Resolved, that the AMA petition Congress to end the Medicare "participation" program because it is not in the best interest of physicians or their patients; and be it further

Resolved, that the AMA oppose the discriminatory policies regarding Medicare "nonparticipants" being used by the government; and be it further

Resolved, that the AMA support the right of every physician to make his or her own judgment regarding the participation program.

The action of the AMA House was communicated to Congress.

5. **Humane Admission Denials.** The resolution asked the AMA to request the Health Care Financing Administration to refrain from issuing denials and termination of Medicare benefits with respect to fragile elderly patients whose hospital stays are appropriately justified by social need.

This resolution was referred to the Board of Trustees for action and report to the House of Delegates at the 1989 Interim Meeting.

In its report to the House of Delegates (I-89), the Council on Medical Service addressed the issues raised by the resolution. The report first discussed the problem of those Medicare beneficiaries who present for care without a clear diagnosis and who require hospital admission to allow adequate diagnosis, stabilization, or treatment. The Council recommended and the House approved efforts to assure Medicare reimbursement for such short-term admissions when needed in the judgment of the attending physician. It was stated that HCFA was considering an instruction to fiscal intermediaries and PROs clarifying their responsibilities in these situations. Recent discussions with HCFA representatives have indicated no new developments. The Council will continue to pursue with HCFA an appropriate instruction to fiscal intermediaries and PROs so that all short-term admissions that extend beyond the 24-hour limit can be reimbursed on an inpatient basis when documented as medically necessary for adequate diagnosis, stabilization, or treatment.

In the same report, the Council noted that for patients who do not require or who no longer require the intensity of services available only in a hospital setting, development of a home health care treatment plan often is the best alternative. Home health care services can include part-time or intermittent nursing care; physical, occupational, or speech therapy; and certain social and home health aide services provided in connection with the patient's condition.

Medicare coverage for home health services was expanded under the Medicare Catastrophic Coverage Act of 1988 (PL 100-360). The program now will pay for home health care services for up to six days a week on an indefinite basis and for seven days a week for up to 38 days, when such services are furnished under a plan of care that is established and periodically reviewed by a physician. Since 1980, no prior hospitalization has been required to establish eligibility for home health care. Home health care can be prescribed for patients who are homebound and who need skilled nursing care following outpatient diagnostic or therapeutic procedures. To help assure access to this service by Medicare beneficiaries, the AMA currently is participating in a newly established HCFA advisory committee to study ways of improving the process of eligibility determination for home health care.

Other services also have been expanded for Medicare beneficiaries who require less than the level of care available only in the hospital. The accessibility of skilled nursing facility (SNF) care is improved under the 1988 Catastrophic Coverage Act, that extended SNF coverage from 100 to 150 days per year, eliminated the three-day prior hospitalization for coverage, and limited beneficiary coinsurance payments to the first eight days of care.

The Council recognized that some elderly persons have special needs for which none of the above services represents an appropriate or accessible choice. However, the Council believes that the use of acute care hospitals and other medical care facilities to provide essentially supportive or social services for such individuals is contrary to the intent of the Medicare program, which is to finance services that are "necessary for the diagnosis or treatment of illness or injury." The use of such facilities for supportive or social services—particularly in the present climate of fiscal austerity—is a disservice to those patients who depend on the program for their medical care.

To help meet the needs of the infirm elderly who require supportive services of an intensity less than that available through the resources previously described, the AMA Board of Trustees, the Council on Medical Service, and the Council on Legislation have developed proposals for improving the financing of long-term care through expansion of eligibility for Medicaid, incentives to purchase private long-term care insurance through asset protection, and tax concessions to encourage family caregiving.

6. **Collective Bargaining.** The resolution requested that the AMA seek the necessary amendments to federal law to permit private practitioners to collectively bargain.

In lieu of the New Jersey resolution, the AMA House adopted Board of Trustees Report YY. The report updates the House on the AMA's efforts to assist physicians and medical societies in negotiations with others. Specifically, the report describes the establishment of the Physicians Negotiation Advisory Office. It outlines the office's activities that relate to antitrust issues, as well as collective negotiation matters. The report also reviews several instances where the AMA has intervened on behalf of physicians with respect to various antitrust issues, and states that the AMA will explore legal action against third-party payors using unfair market power against physicians, as well as the Board's planned consideration of legislation amending the National Labor Relations Act to protect physicians' right to negotiate collectively where appropriate and necessary.

The House also adopted a resolution calling upon the AMA Board of Trustees to investigate the matter of third-party payor anticompetitive activity and initiate any needed action to achieve fair competition and a more level playing field between bulk purchasers of health care services and the providers of those services, and to report its conclusions and actions to the House at the 1989 AMA Interim Meeting.

Board of Trustees Report V (I-1989) indicated that the AMA's Center for Health Policy Research is in the process of identifying those payors whose market position may enable them to engage in anticompetitive practices. Once these payors have been identified, the AMA will contact local medical societies to determine whether the payor may be exercising market power in an unfair manner. If so, the AMA will pursue remedies on behalf of the physicians affected. The AMA will pursue several avenues of relief, including direct negotiation with the payor within the limitations established by law, administrative actions with the state insurance commission, and, if necessary, legal action in the courts.

7. **ICD-9-CM Coding.** The resolution introduced by New Jersey asked the AMA to seek the repeal of the ICD-9-CM diagnostic coding requirement for physician services under Medicare.

The House adopted a substitute resolution that called on the AMA to support legislation to repeal or substantially ameliorate the threat of federal civil money penalty liability for failure to utilize ICD-9-CM coding in the filing of Medicare claims; that the AMA seek amendments to the quasi-criminal Medicare civil money penalty process by providing those charged with civil offenses the same rights now available to defendants in criminal proceedings; that the AMA make every effort to assure that HCFA's implementation of the coding requirement be undertaken with a view to minimizing compliance difficulties to physicians and their office staffs;

and that the AMA review all other Medicare civil monetary penalty provisions, assess the physicians to challenge civil fines levied against them, and report its findings and recommendations to the House of Delegates at the 1989 AMA Interim Meeting.

The AMA informed Health Care Financing Administration representatives that it would be requesting Congress to repeal the ICD-9-CM coding requirement. The AMA position has been communicated to Congress during the catastrophic repeal debate. A draft bill was adopted by the AMA Board of Trustees at its October 1989 meeting.

FISCAL IRREGULARITIES OF AMA

(1) **Background.** In October 1989, the AMA received an inquiry from the news media concerning certain AMA financial matters, and an investigation was begun by AMA staff.

One of the financial matters concerned a 1987 payment by the AMA to Whalen M. Strobhar, who was chief operating officer of the AMA for more than 20 years. On October 15, 1987, Mr. Strobhar informed Mr. John E. Turner of AMA Advisors that money from his executive variable benefit plan money market investment had been transferred into the stock market, and demanded that it be returned to the money market fund. He contended that the AMA had made an error in the transfer and that he deserved to be made whole for losses he incurred in the stock market decline. Because transfers were allowed only at the end of the month, Mr. Strobhar, with Mr. Turner's support for the claim of error, sought and received approval from James H. Sammons, MD, AMA executive vice-president, for a mid-month transfer and reimbursement for his losses based upon the claim of AMA error. Mr. Strobhar was reimbursed $353,826 and the AMA Board of Trustees was not informed of the transaction.

The results of the staff investigation of this incident, including facts contradicting Mr. Strobhar's claims, were presented via a conference call to the AMA Board by Doctor Sammons and the AMA general counsel on October 26, 1989.

On October 27, 1989, Mr. Strobhar resigned and indicated he would repay the money, with interest.

The second financial matter concerned a November 19, 1989, *Chicago Sun-Times* article disclosing that a loan had been authorized by Doctor Sammons to a deputy executive vice-president, Richard A. Noffke, for the purchase of a home. The AMA secured the loan with a mortgage on the home. Mr. Noffke later terminated his employment with the AMA and received sizeable termination pay. He failed to pay the loan as required and the AMA foreclosed on the loan. The property was sold with a possible loss of about $50,000. Again, the AMA Board of Trustees was not informed of the loan or the foreclosure litigation.

(2) **Action of House of Delegates.** The Board of Trustees Report QQ was received by the AMA delegates for review before it was referred to Reference Committee F.

Doctor James S. Todd, AMA, senior deputy executive vice-president, presented his views to the New Jersey delegation. He feels these were two unfortunate events; no further events are anticipated; nothing illegal or immoral was done; the staff and auditor were aware of the activities; and Doctor Sammons should have informed the Board of Trustees.

The following actions have been taken by the AMA Board to assure the continued exercise of its fiduciary responsibilities:

- An independent investigation is being conducted; external accountants will undertake a comprehensive review of financial controls of the AMA.
- No financial arrangements are to be made with any employees by the executive vice-president.
- Accepted the plan for the executive vice-president, Doctor Sammons, to retire on March 31, 1991, and to assure an orderly transition in administrative leadership, is developing a search process immediately to initiate a search for a successor to the position.
- The Board will formulate and institute specifically defined limits upon the authority of the executive vice-president in respect to monetary, compensation, and health policy matters to conform to the exercise of the Board's fiduciary responsibilities.

There was a great deal of discussion of Report QQ at Reference Committee F. Doctor Sammons attended the reference committee and answered many questions.

The report and the recommendations of the American Medical Association Board were accepted by the House of Delegates.

On December 23, 1989, Whalen Strobhar returned the full amount of money, with interest, to the AMA.

On February 9, 1990, Doctor Sammons resigned and Doctor James S. Todd was named acting executive vice-president.

PROSPECTIVE ISSUES OF INTEREST

RBRVS: Currently returned to "drawing board" for additional development. Concept persists viable. No definite AMA commitment to approval at this time.

Practice Parameters: Concept being developed by many specialty societies under AMA sponsorship. Retention of physician autonomy in clinical decision making has been and will remain "linchpin" of AMA policy. The specter and concern of "cookbook" medicine has been expressed. The long-range answer in this issue is likely to be found between the extremes of "none" and "too many."

Dues: Remain at $400 for 1990; $25 to $30 increase for 1991 likely.

Pam Formica, MD. Our own Palma Formica, MD, is a candidate for election to the AMA Board of Trustees during 1990. She possesses admirable qualities and experience to qualify for success in her quest for this prestigious national office. Your delegation members are working assiduously to support her candidacy and accomplish her election.

[redacted]

The Reference Committee recommended that the report be filed with the additional comment that AMA dues will not be raised this year.

HOUSE ACTION: Adopted. The report was filed with one additional comment.

Committee on Long-Range Planning and Development

BERNARD A. RINEBERG, MD, CHAIRMAN

(Reference Committee A)

The Committee on Long-Range Planning and Development was charged to develop goals and objectives for a strategic plan to be utilized as a guide for the Medical Society as it enters the 21st century. The Committee met on July 19, 1989, September 19, 1989, November 14, 1989, and January 30, 1990. On March 9, 1990, the Committee and members of the Board of Trustees attended a Strategic Planning Retreat to discuss, add, and delete items from the Committee's proposed plan. The Board of Trustees, at its April 8, 1990, meeting, approved the following goals and objectives:

A. Professionalism. The Medical Society of New Jersey's goal is to assist the physician in achieving high-quality care for all individuals by supporting activities that strengthen the patient/physician relationship while striving for efficiency and cost effectiveness. To accomplish this, the Medical Society of New Jersey will:

1. Monitor our state's health care needs to assure physician availability to all individuals.
2. Advise and assist public and private agencies in the development of policies and programs designed to meet the needs of patients.
3. Encourage our state medical schools to attract the highest quality of medical student and support programs to recruit and retain the best qualified physicians for New Jersey.
4. Encourage activities that will foster recruitment and retention of nurses and medical support personnel.
5. Support practice management programs to improve physicians' managerial and administrative skills.
6. Support activities that will decrease physician exposure in matters of professional liability.
7. Develop and promote programs to inform physicians of computer and information technology.
8. Support activities that will promote and develop physician leadership skills.

B. Unity. The Medical Society of New Jersey should strive to achieve unity among all physicians. To accomplish this, the Medical Society of New Jersey will:

1. Promote open communication and debate to establish common ground among all physicians.
2. Support and develop activities that will address the specific needs of physician groups within the total membership.
3. Increase communication with and actively support medical specialty societies in those endeavors that foster unity within the profession.
4. Continue to offer unique membership services to encourage new members and to retain older members.

C. Organizational Structure. The Medical Society of New Jersey must maintain a strong state organization with active input to and from county medical societies, state specialty societies, and national organizations. To accomplish this, the Medical Society of New Jersey will:

1. Create a review process within the organizational structure that will coordinate activities and promote greater efficiency.
2. Encourage state society, county societies, and state specialty societies to function as resource centers of medical information for physicians, patients, and other organizations.
3. Encourage consistent standards of admission for membership that are expeditious and fair.
4. Encourage active participation in the activities of the American Medical Association.
5. Establish a mechanism that actively would examine councils and committees to determine their efficiency in meeting assigned responsibilities.

6. Strengthen and enhance the relationship with the Medical Inter-Insurance Exchange of New Jersey and the New Jersey Medical Underwriters, Inc. and closely monitor the quality of services offered to our members.

D. Quest For Quality. The Medical Society of New Jersey should continue to encourage physician participation in educational programs that will improve the quality of care rendered patients. To accomplish this, the Medical Society of New Jersey will:

1. Encourage medical research in New Jersey.
2. Monitor physician competency and offer activities to assure quality care.
3. Seek out physicians who are impaired and provide treatment and support.
4. Create procedures that will assure adequate and worthwhile peer review.
5. Support a professional environment that will attract quality physicians to practice in New Jersey.

E. Communication and Public Relations. The Medical Society of New Jersey should provide information and timely advice to physicians, the public, the legislature, and the media on matters that will affect the health and well-being of the people of New Jersey and the way medicine is practiced. To accomplish this, the Medical Society of New Jersey will:

1. Encourage development of a mechanism at the state, county, and state specialty society levels, when appropriate, that will ensure prompt, timely, and unified response to issues.
2. Encourage activities that will have a favorable impact on the welfare and health of the public.
3. Encourage development of a communication system whereby physicians will be kept abreast of the ever-changing regulations affecting their practices.

F. Legislation. The Medical Society will monitor legislation and regulations that may impact on the welfare and health of the public, and will participate in the formulation of health policy and of public policy that may impact on the health of our patients and the practice of medicine, particularly as it affects accessibility, quality, costs of health care, and funding of research and education. To accomplish this, the Medical Society of New Jersey will:

1. Review the responsibilities and directions of the Medical Society in its deliberations regarding proposed legislation, as the "key man" program, and county involvement in legislative process as a means to assure expeditious and timely input on legislative concerns.
2. Develop a mechanism of notification to the membership of legislative issues that will assure that the Medical Society's position is reflective of the membership's concern.
3. Continue to encourage and utilize the auxiliary of its active participation in legislative programs and issues.

It is suggested that the Board of Trustees and the Committee on Long-Range Planning and Development meet at regular intervals (annually or biennially) to survey the progress of the Society in meeting the goals and objectives as outlined in its strategic plan.

[redacted]

The Reference Committee recommended that the report be filed.

HOUSE ACTION: Adopted. The report was filed.

Committee on Physicians' Health

THOMAS J. LIDDY, MD, CHAIRMAN

(Reference Committee "A")

Following are some of the Program activities for the past year:

1. **Revisions to the Medical Practice Act.** The major event of this past year has been the successful collaboration between the Medical Society of New Jersey and Senator Codey's office to develop a new Medical Practice Act. MSNJ employed Judge Herbert Stern to represent us in negotiations with the Senator to help develop a bill that creates a much more reasonable basis for State Board decisions in disciplinary matters. While we did not gain all that we sought, the changes achieved are quite significant.

2. **Confidentiality.** Attempt was made this year to subpoena the complete chart of an alleged client who was party to a malpractice suit. Counsel was obtained and MSNJ was successful in citing federal regulations prohibiting the release of such information without the plaintiff showing evidence of a clear need to know.

3. **American Medical Association.** Program staff learned that the AMA did not budget for the Department of Substance Abuse to deal with impaired physicians' programs and physicians' health programs for 1990. With cosponsorship by New Jersey's Delegation to the AMA, a resolution was adopted by the AMA House of Delegates calling for the AMA to adequately fund and maintain an impaired physicians' program whose charges would include, but not be limited to, promoting state medical society impaired physicians' programs, providing technical assistance to state programs, conducting scientific and socioeconomic research, and hosting an annual conference to share research and exchange ideas in the field of physician impairment. Since the adoption of this resolution, the AMA has transferred the program to another department.

4. **Seminar on Resident Stress.** Residency directors and residents have been invited to attend a two-day seminar designed to assist in dealing with the problems that surface in their attempts to fulfill the responsibilities of a residency program. Glaxo Pharmaceutical Company and the Physicians' Health Program are cosponsors. The keynote speaker is Doctor John-Henry Pfifferling, a nationally recognized authority from the Institute for Professional Well-Being in Durham, North Carolina.

5. **1989 Adopt-a-Family Program.** For the fourth consecutive year, the Physicians' Health Program conducted the Adopt-a-Family Program for the Holidays. This year $4,650 was distributed to needy clients and their families in addition to the distribution of toys to four children in time for Christmas and Hanukkah. It must be noted that the Board of Trustees, seven county societies, three auxiliaries, and individuals from both MSNJ and NJAOPS donated to this Program.

6. **Annual Raffle.** The 1989 Annual Raffle was held on March 29 at MSNJ headquarters. Gross receipts from the raffle amounted to $55,312. Expenses incurred relating to the raffle were $11,273.54. The total net proceeds added to the grant fund was $44,038.46. The 1990 raffle will be held during the fall.

7. **Grant Fund.** The Grant Fund continues to operate as a fund by which physicians and/or their families can benefit from monies made available to them on the basis of need as a result of the annual raffle sponsored by the auxiliaries of the New Jersey Association of Osteopathic Physicians and Surgeons and of the Medical Society of New Jersey. There were 35 grants issued to 23 people totalling $27,864 during 1989.

8. **Treatment Loan Fund.** This service of the Physicians' Health Program continues to provide low-interest loans to physicians and/or their families based on demonstrated need to cover treatment and/or living expenses. The status of the Treatment Loan Fund is shown in the Table. To date, 30 individuals have received funds from the Treatment Loan Fund.

9. **Subcommittee on Alcohol and Drug Abuse.** The Board of Trustees discharged the

TABLE.

Fund Balance 1/1/89	$42,671.19
Repayment of Principal	4,857.42
Interest on Loans	176.50
Donations	1,530.00
Interest on Fund	13,449.46
Other	<322.67>
Loans Issued 1989	15,149.00
Fund Balance 1/1/90	50,612.90
Total Outstanding Loans	35,985.83
Total Fund Value to 1/1/90 (current balance + outstanding loans)	86,598.73

Special Committee on Alcohol and Drug Abuse and directed that its functions be administered by the Committee on Physicians' Health. In order to carry out this directive and still maintain the confidentiality of matters discussed, the Board of Trustees approved the proposal that a subcommittee of the Committee on Physicians' Health be appointed. The function and scope of this subcommittee is: (a) to sponsor one alcohol and drug abuse educational program annually; (b) to conduct an intervention training seminar annually; and (c) to act as the clearinghouse for MSNJ on issues concerning alcohol and drug abuse. Under the subcommittee's auspices, the 1990 Intervention Training Seminar is scheduled to be held on May 15 and 22. The subcommittee also is in the process of planning a statewide conference involving school nurses, physicians, and counselors to review the new state laws pertaining to drug problems in schools and program development called for in the law.

10. **Statistical Summary.** A statistical illustration of our Program's activities from September 7, 1982, through December 31, 1989, is as follows:

Statistical Report
(by year)
(September 7, 1982-December 31, 1989)

	1982	1983	1984	1985	1986	1987	1988	1989	Total
Primary Impairment									
Alcohol	14	40	19	31	31	18	15	22	190
Drugs	25	16	22	24	25	20	18	23	173
Psychiatric	7	18	19	19	14	15	9	18	119
Senility	1	5	3	2	—	—	1	1	13
Personality Disorder	—	1	—	—	2	1	—	2	6
Other	1	1	8	7	4	2	5	13	41
Annual Total	48	81	71	83	76	56	48	79	542
Degree									
MD	41	66	61	61	67	50	42	67	455
DO	6	10	3	9	4	1	4	3	40
DVM	—	1	3	4	—	1	—	2	11
Other	1	4	4	9	5	4	2	7	36
Annual Total	48	81	71	83	76	56	48	79	542
Total male clients									488
Total female clients									54
Total all clients									542

The Reference Committee recommended that the report be filed.
HOUSE ACTION: Adopted. The report was filed.

Resolution #6

Introduced by: **Essex County Medical Society**
Subject: **Medical Staffs**
Referred to: **Reference Committee "A"**

Whereas, a hospital medical staff is an integral part of the hospital administration and the medical staff plays an important role in the hospitals' service to the community; and

Whereas, there have been numerous instances in New Jersey where the medical staff has not been consulted on matters of vital concern to the medical staff regarding the provision of services to the community; now therefore be it

Resolved, that the Medical Society of New Jersey offer assistance to medical staffs omitted from the decision-making process of supplying care to the community and the public, in keeping with American Medical Association (AMA) and American Hospital Association policy; and be it further

~~**Resolved,** that the Medical Society of New Jersey bring to the attention of the New Jersey Hospital Association any hospital administrators not consulting with medical staffs on major decisions on community care.~~

Resolved, that the medical staffs of New Jersey hospitals alert at the earliest opportunity the Medical Society of New Jersey and the New Jersey Hospital Medical Staff Section of any incidence of hospital administration not consulting with medical staffs on major decisions affecting community health care.

[redacted]

The Reference Committee recommended that the second resolved of Resolution #6 be amended to read as follows:

Resolved, that the Medical Society of New Jersey alert the MSNJ Hospital Medical Staff Section and the New Jersey Hospital Association for intervention in any instances of hospital administrators not consulting with medical staff on major decisions on community care.

The Reference Committee recommended that Resolution #6 be adopted as amended.

HOUSE ACTION: Not adopted. Resolution #6 was adopted as amended by the House.

Resolution #13

Introduced by: **John Winslow, MD, Delegate, Essex County**
Subject: **Right To Prescribe the French "Abortion Pill"**
Referred to: **Reference Committee "A"**

Whereas, the House of Delegates of the Medical Society of New Jersey, at its annual meeting in May 1989, overwhelmingly passed an amended resolution guaranteeing a woman's right to make her own choice to have an abortion (termination of pregnancy) performed, provided it is done in a medically safe manner by a competent physician, and at a safe time relatively early in a pregnancy; and

Whereas, a French pharmaceutical company has developed a medication that, taken early in a pregnancy, causes a safe and spontaneous abortion, with no significant side effects; now therefore be it

Resolved, that the House of Delegates, at the annual meeting of the Medical Society of New Jersey, approve the introduction of the French "abortion pill," RU-486 (or similar code number), and urge its approval by the Food and Drug Administration for conscientious prescription use in the United States.

[redacted]

The Reference Committee recommended that Resolution #13 be rejected.

HOUSE ACTION: Adopted. Resolution #13 was rejected.

Resolution #14

Introduced by: **Frank J. Primich, MD, Delegate, Hudson County**
Subject: **Good Samaritan Immunity**
Referred to: **Reference Committee "A"**

Whereas, current proposals for payment of uncompensated physician services will further erode our autonomy and ethical standards; and

Whereas, counter proposals have little chance of adoption in the near future; and

Whereas, the patients involved for socioeconomic, educational, and linguistic reasons—not to mention the "lottery mentality,"—represent a medical liability high-risk group; and

Whereas, prevailing concepts of liability, beyond a financial burden, have had a devastating effect upon physicians' practice patterns; and

Whereas, this has generated vast defensive medicine expenditures that directly impact upon all bill payors; now therefore be it

Resolved, that the Medical Society of New Jersey petition the state legislature to deem physicians immune to charges of medical liability for uncompensated care, except in the case of grossly negligent malpractice; and be it further

Resolved, that this proposal be forwarded to the American Medical Association (AMA) for national consideration.

[redacted]

The Reference Committee recommended that Resolution #14 be rejected.

HOUSE ACTION: Not adopted. Resolution #14 was adopted.

Resolution #15

Introduced by: **Frank J. Primich, MD, Delegate, Hudson County**
Subject: **Tax Deductions for Uncompensated Care**
Referred to: **Reference Committee "A"**

Whereas, there are an estimated 35,000,000 people without health insurance; and

Whereas, they are portrayed falsely as without access to health care; and

Whereas, in actuality, emergency, urgent, and a goodly amount of routine care continues to be available, primarily through hospitals; and

Whereas, the growing costs of such uncompensated care, to a large extent, are reimbursed to the hospitals through a devious and often misrepresented process of cost shifting; and

Whereas, physicians' services and responsibilities in the care of such cases neither is compensated, acknowledged, nor appreciated; and

Whereas, shortsighted physicians already are supporting national health insurance as a means of obtaining something in return; and

Whereas, accompanying regulations and restrictions, through Medicaid and Medicare would threaten further our individual freedoms to render appropriate cost-effective care to our patients; and

Whereas, an alternative to this unacceptable proposal is vital to any meaningful resistance; now therefore be it

Resolved, that the Medical Society of New Jersey petition the American Medical Association (AMA) to propose to Congress that such uncompensated costs be allowable as nontaxable deductions in the determination of physicians' net income; and be it further

Resolved, that the public be made aware of this vast, and often medicolegal, hazardous, and benevolent service being rendered by the medical profession.

The Reference Committee recommended that Resolution #15 be referred to the Board of Trustees for appropriate action.

HOUSE ACTION: Adopted. Resolution #15 was referred to the Board of Trustees for appropriate action.

Resolution #16

Introduced by: **Frank J. Primich, MD, Delegate, Hudson County**
Subject: **No to National Health Insurance**
Referred to: **Reference Committee "A"**

Whereas, Medicare supporters originally overcame physician resistance through the promises of noninterference in medical decision making and patients' freedom of choice of providers;

Whereas, those early reassurances long since have gone by the boards; and

Whereas, the American Medical Association (AMA) proposal essentially is identical to Senator Kennedy's "solution"; and

Whereas, Senator Kennedy's approach to health care financing is abhorrent to most physicians; and

Whereas, much of the $80 billion cost will be shifted deviously to small businesses and existing insurers; and

Whereas, the predictable failure of the program will result in a further undeserved "blame shift" to health care providers; and

Whereas, after-the-fact explanations have minimal impact and little appreciable chance of repeal or reversal; now therefore be it

Resolved, that the Medical Society of New Jersey petition the AMA to resist any national health insurance program that makes the unattainable promise of high-quality care and free choice for all patients; and be it further

Resolved, that the AMA be requested to propose a "two-class" system, with the government "directly" responsible for funding the "second-class" care.

Resolved, that the Medical Society of New Jersey recognizes that the federal government already has created a tiered system of medical care; and be it further

Resolved, that the Medical Society of New Jersey and the AMA advise the federal and state governments that they should pay for the lowest tier of medical care.

[redacted]

Doctor Robert H. Stackpole, delegate from Union County, suggested the addition of the third and fourth resolveds.

The Reference Committee recommended that Resolution #16 be rejected.

HOUSE ACTION: Not adopted. Resolution #16 and suggested amendments (the third and fourth resolveds) were referred to the Board of Trustees.

Secretary

BERNARD ROBINS, MD

(Reference Committee "B")

The office of the Secretary has continued its usual routines, primarily involving maintenance of membership records, correspondence, minutes of Board of Trustees' meetings, telephone inquiries, and completion of numerous questionnaires originating from various sources.

During the administrative year, the Secretary attended the meetings of the Board of Trustees and the several committees of which he is chairman, member, or advisor.

Membership (as of December 31, 1989)

Active	Paid	7,438		
	Exempt	845		
Resident	Paid	149	8,432***	
*Associate	Paid		58	
**Affiliate	Paid		86	
	Exempt		5	
State Emeritus				1,086
Total of above				9,667
Provisional Residents (six months)				14
State Honorary				1
New and Reinstated Members				
Active				611
Resident				60
*Associate				33
Transfers within the state				35
Transfers out-of-state and resignations				98
Members deceased				124
Members dropped				388
Active:				
a. Nonpayment of dues			278	
b. Did not comply with bylaw requirements regarding continuing medical education, whose credits were due in 1988			37	
c. New Jersey license suspended			1	
Resident (nonpayment of dues)			45	
*Associate (nonpayment of dues)			20	
**Affiliate (nonpayment of dues)			7	

*Associate membership (nonlicensed in New Jersey) designates interns and residents.

**Affiliate membership designates physicians who no longer practice in New Jersey.

***Adjusted for transfers out-of-state, resignations, and deaths.

A comparison of December 31, 1988, to December 31, 1989, by county shows the following net changes of active paid membership:

Atlantic	+ 9	Gloucester	+ 1	Ocean	+ 1
Bergen	− 1	Hudson	− 30	Passaic	− 22
Burlington	− 9	Hunterdon	+ 1	Salem	− 6
Camden	+ 2	Mercer	− 9	Somerset	+ 6
Cape May	− 1	Middlesex	− 10	Sussex	+ 1
Cumberland	− 7	Monmouth	− 9	Union	− 8
Essex	− 26	Morris	− 5	Warren	− 7

AMA Membership. A total of 9,505 New Jersey licensed physicians maintain active membership in the AMA. The Society's representation in the AMA House of Delegates stands at ten delegates—one for each thousand members, or fraction thereof.

Credentials. The Committee on Credentials reviewed and acted upon membership applications and their supporting credentials as submitted through the component societies. The statistical breakdown reflects the Committee's activities during the period February 1, 1989, through January 31, 1990.

	Provisional	Residents		Grand
Received	***Associate**	**Licensed**	**Active**	**Total**
	33	32	415	480

	Provisional	Residents		Grand
Reviewed and found	***Associate**	**Licensed**	**Active**	**Total**
(A) Satisfactory	32	28	364	424
(B) Unsatisfactory	0	0	0	0
Pending	1	4	27	32
Withdrew	0	0	24	24
Grand Total	33	32	415	480

*Associate membership (nonlicensed in New Jersey) designates interns and residents.

The Committee extends appreciation to the directors and the secretaries of component societies, and to those who assist them, as well as the County Credentials Committees, for their cooperation in processing membership applications. It especially would be helpful to the Credentials Committee of the Medical Society of New Jersey if those who process credentials in the component societies would call specific attention to any deficiencies or questionable data being submitted on the application form. This procedure will help insure more accurate and speedy evaluation of credentials. The chairman wishes to thank his Committee members for their diligence and cooperation.

Membership Directory. The 1989 edition of the *Membership Directory* has been available for one year. Since the original distribution of 9,884 copies to members, 1,771 copies have been sold. It is anticipated that data sheets for the 1991 edition will be mailed to members about September 1990. Your cooperation in returning them promptly will be greatly appreciated.

[redacted]

The Reference Committee recommended that the report be filed.
HOUSE ACTION: Adopted. The report was filed.

Treasurer

GERALD H. ROZAN, MD

(Reference Committee "B")

These interim financial statements, prepared in accordance with generally accepted accounting principles, reflect the financial position and results of operation of the Medical Society of New Jersey through February 28, 1990.

Since they are interim statements (the Society's fiscal year is June 1-May 31), the figures are unaudited. A complete audit will be conducted of the books of the Society as of May 31, 1990, and an audited report prepared as of that date. A complete audit was made, and copies sent to all county medical societies, as of May 31, 1989.

Medical Society of New Jersey
Balance Sheet
February 28, 1990
(Unaudited)

Assets		
Cash		$ 81,076
Investment in money market fund		1,081,098
Marketable securities—(approximate market)		2,839,649
Accounts receivable—member assessments		502,950
Medical student loans (net allowance) for doubtful loans of $20,000)		195,493
Property, Plant, and Equipment		
Land	$ 150,000	
Building and improvements	2,563,865	
Furniture and fixtures	529,496	
Construction in progress	2,463,726	
	5,707,087	
Less allowance for depreciation	(1,069,228)	4,637,859
Prepaid expenses		116,676
Other assets		303,079
Investment in New Jersey State Medical Underwriters, Inc.		30,367
		$9,788,247
Liabilities and Fund Balance		
Accounts payable and accrued expenses		$ 408,694
Assessments collected for AMA		24,995
		433,689
Loan payable to Medical Inter-Insurance Exchange of New Jersey		2,428,253
Mortgage payable		1,334,754
Deferred revenue from member assessments		2,158,359
Deferred revenue—public relations assessment		234,665
Deferred revenue—other		217,098
Fund Balance		2,981,429
		$9,788,247

Medical Society of New Jersey
Statement of Revenue and Expenses
9 Months Ended February 28, 1990
(Unaudited)

Revenue		
Membership dues		$1,869,698
Publication sales and advertising income		208,655
Amortization of Physicians' Health Program		187,146
Amortization of public relations assessment		82,376
Investment income		167,407
Royalty income		190,218
Rental income		389,483
Annual Meeting		32,755
Other income		51,030
	Total Revenue	3,178,768
Expenses		
Conferences and meetings		342,961
Member services		667,244
		1,010,205
General and administrative		1,454,901
Interest		255,819
Depreciation		124,145
	Total Expenses	2,845,070
Excess of revenue over expenses before federal income tax		$ 333,698
Provision for federal income tax		49,898
		283,800
Equity in income (loss) of unconsolidated subsidiary		(621)
Excess of revenue over expenses		283,179
Fund balance at June 1, 1989		2,698,250
Fund balance at February 28, 1990		$2,981,429

The Reference Committee recommended that the report be filed.
HOUSE ACTION: Adopted. The report was filed.

Committee on Finance and Budget

MATIS A. FERMAGLICH, MD, CHAIRMAN

(Reference Committee "B")

The Committee on Finance and Budget met on Thursday, March 29, 1990, for the purpose of reviewing the proposed budget for the 1990-1991 fiscal year. The proposed budget and the following recommendations were approved by the Board of Trustees on April 8, 1990, and are submitted to the House of Delegates for approval.

RECOMMENDATIONS

1. That the budget for the fiscal year beginning June 1, 1990, and ending May 31, 1991, in the amount of $4,301,000 with $2,590,000 to be raised through member assessments be adopted.
2. That the 1991 assessment be set at $350 per regular dues-paying member. (No change from prior year.)
3. That the 1991 assessment be set at $60 per member for affiliate members (no longer practicing in New Jersey). (No change from prior year.)
4. That the 1991 assessment for associate members (interns-residents nonlicensed in New Jersey) and licensed residents, provided the individual is in a residency program entered upon within a reasonable time after his or her graduation from medical school, be set at $25. (No change from prior year.)
5. That the 1991 assessment be set at $10 per student for medical students. (No change from prior year.)

[redacted]

The Reference Committee recommended the approval of recommendations 1 through 5.
HOUSE ACTION: Adopted. The recommendations were approved.

Medical Society of New Jersey
Statement of Revenue and Expenses
Proposed Budget
Fiscal Year Ending May 31, 1991

Revenue (other than member assessments)	
Publication sales and advertising income	$ 230,000
Amortization of Physicians' Health Program	269,000
Amortization of public relations assessment	216,000
Investment income	110,000
Royalty income	262,000
Rental income	567,000
Annual Meeting	15,000
Membership Directory sales	55,000
Other income	10,000
Total Revenue	$1,734,000
Expenses	
Conferences and meetings	564,000
Member services	644,000
Publications	326,000
Total Program Expenses	$1,534,000
General and administrative	2,237,000
Interest	359,000
Depreciation	171,000
Total Expenses	$4,301,000
Amount of expenses over revenue to be raised through member assessments (including *NEW JERSEY MEDICINE* subscriptions and Annual Meeting assessments)	$2,567,000

Revenue from Member Assessments
Fiscal Year Ending May 31, 1991

$350 x 7,400 members	$2,590,000

Proposed Budget: Fiscal Year Ending May 31, 1991

	Approved Budget 1989/90	Estimate for Y/E 5/31/90	Proposed Budget 1990/91
Compensation			
Salaries	$1,080,000	$1,067,000	$1,150,000
Pension plan	102,000	104,000	115,000
	1,182,000	1,171,000	1,265,000
Professional Fees			
Audit	21,000	27,000	23,000
Legal	50,000	125,000	100,000
Actuarial	3,000	6,000	4,000
Special consultants	10,000	6,000	8,000
	84,000	164,000	135,000
Councils and Committees			
Public Relations	250,000	250,000	260,000
Public Relations—special assessment	200,000	104,000	216,000
Legislation	88,000	87,000	88,000
President and Presidential Officers	75,000	75,000	75,000
AMA Delegates	87,000	91,000	88,000
MSNJ Auxiliary	25,000	31,000	30,000
Medical Education	35,000	40,000	43,000
Board of Trustees	35,000	35,000	35,000
Judicial Council	1,000	1,000	1,000
Reimbursement of reps. to mtgs.	3,000	3,000	3,000
Other Councils and Committees	50,000	40,000	45,000
Medical Student Association	12,000	5,000	10,000
Grant allocation—MIIENJ	(330,000)	(330,000)	(330,000)
	531,000	432,000	564,000
Member Services			
Physicians' Health Program	342,000	342,000	387,000
Annual Meeting	120,000	120,000	150,000
Professional Liability	52,000	48,000	50,000
Membership Directory	55,000	59,000	57,000
	569,000	569,000	644,000
Publication			
NEW JERSEY MEDICINE	319,000	316,000	326,000
General Administrative and Operating Expenses			
Building operations—(including depreciation)	701,000	694,000	713,000
Insurance	184,000	177,000	197,000
Payroll taxes	80,000	84,000	90,000
Other general office costs	299,000	235,000	367,000
	1,264,000	1,190,000	1,367,000
Total	$3,949,000	$3,842,000	$4,301,000

[redacted]

The Reference Committee recommended that the report be filed.
HOUSE ACTION: Adopted. The report was filed.

Council on Mental Health

THOMAS R. HOUSEKNECHT, MD, CHAIRMAN

(Reference Committee "B")

The Council on Mental Health held its reorganizational meeting on November 9, 1989. The Council continues to monitor the matter of military psychologists prescribing drugs and psychologists doing consultations in hospitals without psychiatrists' supervision. The Council agreed psychiatrists should be represented on the Committee on Senior Citizens and the Governor's Advisory Council on Mental Health Services Planning, and the Council is working to facilitate such appointments. The Council reviewed proposed legislation on isolation of HIV positive psychiatric patients in state hospitals. The Council believed there was a place for isolation in the face of active AIDS disease with the presence of severe secondary infections that could pose a threat to hospital staff.

[redacted]

Several persons expressed concern about military programs permitting psychologists to prescribe drugs and perform consultations. It was suggested that the Board of Trustees review policy already established and act accordingly.

The Reference Committee recommended that the report be filed.

HOUSE ACTION: Not adopted. The report was referred by the House of Delegates to the Board of Trustees for further consideration.

Council on Public Health

CHARLES J. MOLONEY, MD, CHAIRMAN

(Reference Committee "B")

The Council on Public Health met on December 6, 1989. The Council recommended to the Board of Trustees that MSNJ petition the governor, the commissioners of Health and of Education, and the state legislature to intensify efforts to vaccinate unimmunized children, and to require a second MMR vaccination for school attendance. This recommendation will be submitted to the Board of Trustees for their review at its February 18, 1990, meeting.

Resolution #4—Tanning Salon Legislation. This resolution still is under review by the Council on Public Health.

The Committee on Environmental Health recommended to the Council that conferences be arranged for the members of the Medical Society of New Jersey, to educate them and to help them understand the rules and regulations pertaining to medical waste, and that representatives of the Department of Environmental Protection set up these programs through the Academy of Medicine of New Jersey.

Also, the Committee on Environmental Health has reviewed several companies looking for endorsement for medical waste disposal. The Committee is reviewing this in conjunction with the Committee on Membership Services acting on Resolution #15 concerning endorsing medical waste disposal companies.

[redacted]

The Reference Committee recommended that the report be filed.

HOUSE ACTION: Adopted. The report was filed.

Committee on Annual Meeting

DONALD J. HOLTZMAN, MD, CHAIRMAN

(Reference Committee "B")

The Committee met on September 6, 1989. It was the strong feeling of the group that the meeting be held in Atlantic City, if at all possible. The Taj Mahal Casino Hotel could not give us a commitment. The Sands Hotel appeared anxious for our business and the package they offered appeared to be satisfactory. For the record, it was noted that the New Jersey Bar Association meets there for their annual meeting, and are pleased with the facility.

As regards future meeting sites, the Taj Mahal remains a possibility. If we are treated well at the Sands, it may be a consideration for future meetings. As more hotel facilities become available in Atlantic City, the opportunities we will have for booking and arrangements may be better. Any overflow activities for this meeting can be handled by the adjacent Claridge Hotel.

As regards to the schedule for the upcoming meeting, the possibility of shortening the meeting and rearranging the schedule was felt to be unworkable. The possibility of scheduling the reference committee meetings further apart or sequentially could not be worked out satisfactorily.

The schedule of the meeting, therefore, will be traditional, with the Board of Trustees' meeting starting on Saturday, May 5, 1990. On Sunday, May 6th, registration will open for the formal meeting and the meeting will conclude on Wednesday, May 9th. The Medical Society of New Jersey Board of Trustees approved the convention site and meeting schedule on September 17, 1989.

The educational program will start at 10 A.M. Sunday morning, and the exhibits will open at 11 A.M. The first House of Delegates will convene at 1 P.M., and then the first reference committee meetings will be at 3:30 P.M.

On Monday, May 7th, the House of Delegates will convene at 9 A.M., when elections will be held. The Professional Liability Program will be held at 1 P.M. on that day; later that afternoon, the JEMPAC Political Forum followed by the wine and cheese reception are scheduled.

On Tuesday, May 8th, the House of Delegates will convene at 9 A.M., and again at 1:30 P.M. The Inaugural Reception and Dinner will be at 6:30 P.M., and the meeting will conclude on Wednesday, May 9th.

The exhibit area at the Sands Hotel is separate from the rest of the hotel, and more than satisfactory. We will be using the showroom for several of our functions including the Inaugural Reception and Dinner.

The tentative plans for the educational aspects of the meeting include two seminars: "The Four Complications of Diabetes," and "Identification and Management of Asymptomatic HIV-Infected Persons in New Jersey."

As regards future planning, it would be wise to try and have things relatively firmed up several years in advance. As more facilities become available, future opportunities may be progressively more attractive.

* * *

There was mostly adverse comment concerning the choice of Atlantic City as a site for the Annual Meeting. It was suggested that the Committee expand its investigation of available sites.

The Reference Committee recommended that the report be filed.

HOUSE ACTION: Adopted. The report was filed.

Nominations for Emeritus Membership

(Reference Committee "B")

The following nominations for election to emeritus membership at the 1990 Annual Meeting have been received from the component societies. Conforming to the provisions of the Bylaws, Chapter I—Membership Section 1—Composition (d), all nominees have been members in good standing of a component society and who by reason of age or infirmity have retired from the active practice of medicine, or members of this Society who have been disabled by reason of military service.

Bergen County

Vance T. Alexander, MD, Davidson, NC (formerly Ridgewood); age 86
Joseph Catania, MD, Garfield; age 76
John T. Connell, MD, Englewood; age 64
Louis De Luca, MD, Ridgewood; age 76
Philip O. Ettinger, MD, Leonia; age 54
Jerome Ferber, MD, Dumont; age 66
Robert S. Frankel, MD, Hackensack; age 68
John W. H. Glasser, MD, Fair Lawn; age 78
Cornelius F. Ivory, MD, Ridgewood; age 72
John P. Lauricella, MD, Englewood Cliffs; age 62
Vincenzo Lissandrello, MD, Teaneck; age 59
Rufus R. Little, MD, Ho-Ho-Kus; age 83
Howard W. Marraro, MD, Englewood; age 65
Joachim Oppenheimer, MD, Glen Rock; age 66
Frank J. Schaberg, MD, Hackensack; age 77
Jane V. Sokoll, MD, Oradell; age 66
Juin P. Tsai, MD, North Caldwell; age 70
June Winkler, MD, Hasbrouck Heights; age 62

Burlington County

Conrad M. Brahin, MD, Cherry Hill; age 66
Robert Heal, MD, Delanco; age 66
Thomas M. McMillan, III, MD, Medford; age 68
Gabriel Tatarian, MD, Willingboro; age 67

Camden County

August P. Ciell, MD, Cherry Hill; age 71
John M. Collier, MD, Haddonfield; age 66
Howard D. Easling, MD, Merchantville; age 66
Frank Orland, MD, Cherry Hill; age 70

Essex County

Robert H. Areson, MD, Savannah, GA (formerly Wayne); age 75
Sylvia F. Becker, MD, Verona; age 69
Aaron Bernstein, MD, Short Hills; age 70
Robert V. Dorian, MD, Livingston; age 62
John F. Fitzgerald, MD, Bloomfield; age 63
Lydia S. Lashewycz, MD, Livingston; age 67
Michael T. Mahoney, MD, Roseland; age 66
Horace D. Marucci, MD, West Orange; age 73
Walter Nudelman, MD, Springfield; age 66
Robert K. Spiro, MD, Bloomfield; age 66
Paul H. Wannemacher, MD, West Orange; age 71
Francis A. Wood, MD, Montclair; age 63
Mary Wood, MD, Montclair; age 65

Hudson County

A. Albert Lepis, MD, Jersey City; age 84
Leon Reznikoff, MD, West Hartford, CT (formerly Clifton); age 90
Moses M. Rothberg, MD, Palm Harbor, FL (formerly West New York); age 88
Gaspare F. Saitta, MD, Clifford Park; age 67
Albert V. Saradarian, MD, Rutherford; age 80
Diego Scambia, MD, Duck Key, FL (formerly Union City); age 62
Evaristo L. Silva, MD, Union City; age 67

Mercer County

Rafael Garces, MD, Princeton; age 59
Manuel Ortiz, MD, Lawrenceville; age 67

Middlesex County

Francis J. Godrey, MD, Nakomis, FL (formerly Sayreville); age 66
Seymour Lifschutz, MD, New Brunswick; age 68
Jasper L. Van Avery, MD, New Brunswick; age 67

Monmouth County

Emanuel Abraham, MD, Deal Park; age 69
Forman T. Bailey, Jr, MD, Ocean Grove; age 70
Alexander C. Baret, MD, West Long Branch; age 69
Peter R. Brady, MD, New Monmouth; age 67
George G. Bruzza, MD, Wall; age 72
Robert S. Ciampa, MD, Rome, Italy (formerly Long Branch); age 69
Pascal L. Federici, MD, Long Branch; age 71
Mario F. Galassi, MD, Holmdel; age 66
Frank W. Gallo, MD, Little Silver; age 70
J. Berkeley Gordon, MD, Rumson; age 89
William A. Herbert, MD, Avon by the Sea; age 67
Charles F. Laycock, MD, Beverly Hills, FL (formerly Long Branch); age 73
James G. Mazza, MD, Boynton Beach, FL (formerly Long Branch); age 71
Allen M. Nicas, MD, Long Branch; age 69
James W. Parker, Jr, MD, Red Bank; age 71
Birute S. Preikstas, MD, Oakhurst; age 68
Carmen J. Scarpellino, MD, Monmouth Beach; age 68

Morris County

Helen L. Miller, MD, Kinnelon; age 94
David R. Taylor, MD, Bernardsville; age 64
Eugene L. Watkins, MD, Morristown; age 72

Ocean County

Albert S. Basri, MD, Lakewood; age 71
James F. Dougherty, Jr, MD, Sea Girt; age 66
Jo Anne Overleese, MD, North Beach Haven; age 67

Passaic County

Edward A. Abramo, MD, Wyckoff; age 67
John J. Bowe, MD, Ridgewood; age 68
Gordon W. Howe, MD, Fair Lawn; age 70
Joseph F. Kennedy, MD, Clifton; age 70

Somerset County

Harry Abramson, MD, Somerville; age 75
Albert M. Doswald, MD, Bridgewater; age 67
Joseph Pahlow, MD, Somerville; age 66
Henry A. Thomas, MD, Manville; age 75

Union County

Harry L. Baird, MD, Califon; age 66
Arnold J. Bajek, MD, Summit; age 67
Paul L. Chodosh, MD, Elizabeth; age 66
Edmond B. Cuce, MD, Murray Hill; age 70
Fermin E. Fernandez, MD, Elizabeth; age 64
Robert B. Francis, MD, Alpharetta, GA; age 68
Alfred L. Gandler, MD, Plainfield; age 65
Eugene R. Kertis, MD, Westfield; age 67
William J. Pflum, MD, Rumson; age 66
Emil G. Piserchia, MD, Hillside; age 66
John A. Sarno, MD, Belleville; age 70
Gloria O. Schrager, MD, Westfield; age 66
Robert C. Specht, MD, Summit; age 67

Warren County

James H. Spillane, MD, Phillipsburg; age 63

The Reference Committee recommended that the nominations be approved.
HOUSE ACTION: Adopted. The nominations were approved.

Supplemental Report #1

Nominations for Emeritus Membership

(Reference Committee "B")

Additional nominations for election to emeritus membership have been received:

Burlington County

James Q. Atkinson, MD, Vincentown; age 72

Hudson County

Maceo M. Howard, MD, Short Hills; age 67
Alfred J. Swyer, MD, West New York; age 71

Union County

Evalina D. LiSooey, MD, Mountainside; age 68

Warren County

Volmar A. Mereschak, MD, Phillipsburg; age 68

The Reference Committee recommended that the nominations be approved.
HOUSE ACTION: Adopted. The nominations were approved.

Supplemental Report #2

Nomination for Emeritus Membership

(Reference Committee "B")

An additional nomination for election to emeritus membership has been received:

Union County

Louis J. Belle, MD, Elizabeth; age 69

[redacted]

The Reference Committee recommended that the nomination be approved.
HOUSE ACTION: Adopted. The nomination was approved.

Supplemental Report #3

Nominations for Emeritus Membership

(Reference Committee "B")

The following additional nominations for election to emeritus membership have been received:

Essex County

Margaret M. Fitzpatrick, MD, Cliffside Park; age 67
Jose M. Vilanova, MD, Toms River; age 65

Hudson County

Chester R. Rydwin, MD, Jersey City; age 70
Hector R. Wiltz, MD, North Bergen; age 64

[redacted]

The Reference Committee recommended that the nominations be approved.
HOUSE ACTION: Adopted. The nominations were approved.

Resolution #1

Introduced by: **Union County Medical Society**
Subject: **HIV Infection as a Communicable Disease**
Referred to: **Reference Committee "B"**

Resolved, *that the policy of the Medical Society of New Jersey state* that human immunodeficiency virus infection be considered as any other *reportable* communicable disease, and patients *be* treated accordingly.

[redacted]

The Reference Committee recommended that Resolution #1 be amended by the addition of the words in italics.

HOUSE ACTION: Adopted. Resolution #1 was adopted as amended by the Reference Committee.

Resolution #4

Introduced by: **Essex County Medical Society**
Subject: **Regulation of Office Laboratories**
Referred to: **Reference Committee "B"**

Whereas, the New Jersey State Department of Health is investigating and considering regulating the policies and procedures for laboratories that perform nondiagnostic screening laboratory assays, including cholesterol, hematocrit, erythrocyte protoporphyrin, and pregnancy tests; and

Whereas, such screening tests presently do not fall under the clinical regulations of the New Jersey Clinical Laboratory Improvement Act; and

Whereas, many physicians are interested in being laboratory directors for work performed on their own patients; and

Whereas, physicians should have as many low-cost tests as possible so that higher medical costs are not passed on to patients; now therefore be it

~~**Resolved,** that the Medical Society of New Jersey petition the New Jersey State Department of Health to allow a physician the option to be his own laboratory director; and be it further~~

~~**Resolved,** that a physician be permitted to have as many tests as possible placed on the unregulated list in order to have many tests available to patients for their convenience and low cost~~.

Resolved, that the Medical Society of New Jersey petition the New Jersey Department of Health to promulgate such guidelines as have been proposed and acted upon by other states which allow treating physicians the option to be their own laboratory director, and to perform appropriate laboratory tests; and be it further

Resolved that exemptions be sought to allow a physician to perform, in his own laboratory, an appropriate number of laboratory tests, subject to proper safeguards and standards on a specialty specific basis, for the convenience and cost savings to the patient.

[redacted]

The Reference Committee recommended that a substitute resolution for Resolutions #4 and #28E be adopted.

HOUSE ACTION: Adopted. The Substitute Resolution was adopted.

Resolution #5

Introduced by: **Essex County Medical Society**
Subject: **Realistic Child and Scholastic Athletes' Benefits**
Referred to: **Reference Committee "B"**

Whereas, Florida, Maine, Minnesota, and Washington have laws to provide children and scholastic athletes with realistic health insurance; and

Whereas, children and scholastic athletes do not have lobbies, as do other groups with insurance problems, and need the Medical Society of New Jersey as an advocate; and

Whereas, even most school and athletic insurance policies no longer provide uniform benefits of value in all school injuries; now therefore be it

Resolved, that the Medical Society of New Jersey petition the New Jersey State Department of Insurance to investigate realistic health insurance for children and scholastic athletes, as well as realistic school and athletic insurance benefits to cover student injuries; and be it further

Resolved, that the Medical Society of New Jersey advise the New Jersey State Department of Insurance that it stands ready to form a committee to advise the state of the problem and to suggest possible solutions.

[redacted]

The Reference Committee, while recognizing the positive intent of the Resolution, felt that further study is necessary for effective implementation of its objectives.

The Reference Committee recommended that Resolution #5 be referred to the Board of Trustees for appropriate action.

HOUSE ACTION: Adopted. Resolution #5 was referred to the Board of Trustees for appropriate action.

Resolution #27E

Introduced by: **Robert H. Stackpole, MD, Delegate, Union County**
Subject: **HIV Testing for Hospital Admissions**
Referred to: **Reference Committee "B"**

Whereas, the Centers for Disease Control reported on May 2, 1990, an incidence of 25 percent HIV positive tests at one hospital in the New Jersey-New York area; and

Whereas, New Jersey has one of the highest rates of HIV positivity in the nation; and

Whereas, knowledge of patients' HIV status is important in further diagnosis and treatment of those patients; and

Whereas, knowledge of HIV positivity is helpful in protecting hospital personnel; now therefore be it

Resolved, that the Medical Society of New Jersey request that the New Jersey Department of Health require that all hospital admissions have HIV testing *where medically indicated.*

Resolved, that the Medical Society of New Jersey request the New Jersey Department of Health to treat HIV testing like any other blood test and eliminate the need for a special consent.

[redacted]

The Reference Committee recommended that the Resolution be amended by adding the words "where medically indicated" to the first resolved.

Doctor Richard H. McShane, delegate from Essex County, suggested the addition of a second resolved.

The Reference Committee recommended that Resolution #27E be adopted as amended by the Reference Committee.

HOUSE ACTION: Not adopted. Resolution #27E and suggested amendments were referred to the Board of Trustees.

Resolution #28E

Introduced by: **Henriette E. Abel, MD, Delegate,**
The Dermatological Society of New Jersey
Subject: **Increased Exemptions from CLIA 88 on a Specialty Specific Basis**
Referred to: **Reference Committee "B"**

Whereas, the Health Care Financing Administration is proposing to implement CLIA 88 in the immediate future; and

Whereas, the proposed list of exempt laboratory procedures is very limited; and

Whereas, patients will be denied ready access to and rapid interpretation of ordinary, common laboratory tests, that are routinely performed in physicians' offices, for which these physicians are specifically trained; and

Whereas, denial of these common in-office laboratory procedures will result in greatly increased expense and tremendous inconvenience, which is to the detriment of patients' health; and

Whereas, specialists are well-trained in doing certain laboratory tests in their own fields, such as dermatologists performing KOH tests, fungal cultures, Tzanek smears, and dark field examinations, urine cultures by urologists, hanging drop by gynecologists, and blood sugars by internists; now therefore be it

~~**Resolved,** that the Medical Society of New Jersey protest to the Health Care Financing Administration that the new CLIA 88 regulations should allow a moderate number of exemptions on a specialty specific basis for tests that normally are performed in a physician's office.~~

Resolved, that the Medical Society of New Jersey petition the New Jersey Department of Health to promulgate such guidelines as have been proposed and acted upon by other states which allow treating physicians the option to be their own laboratory director, and to perform appropriate laboratory tests; and be it further

Resolved, that exemptions be sought to allow a physician to perform, in his own laboratory, an appropriate number of laboratory tests, subject to proper safeguards and standards on a specialty specific basis, for the convenience and cost savings to the patient.

[redacted]

The Reference Committee recommended that a substitute resolution for Resolutions #4 and #28E be adopted.

HOUSE ACTION: Adopted. The Substitute Resolution was adopted.

Council on Medical Services

RICHARD H. SHARRETT, MD, CHAIRMAN

(Reference Committee "C")

The Council reviewed the Board of Trustees' referral of the reimbursement and completion of the Social Security Disability Determination form. The Council adopted an abbreviated form that would require less time and effort for completion and has sent this recommendation to the Board of Trustees for their consideration.

The Council also reviewed the process regarding PRO preauthorization. The Council recommended to the Board of Trustees that the Medical Society of New Jersey recognize that Pennsylvania Blue Shield is inappropriately denying or postponing payments for prostatectomy in cases of carcinoma of the prostate where precertification is not required.

The Council also has asked the Board to request Pennsylvania Blue Shield to review its payment procedures in all cases where precertification numbers are not required, as well as other such procedures having no number due to emergency circumstances.

[redacted]

The Reference Committee recommended that the report be filed.

HOUSE ACTION: Adopted. The report was filed.

Resolution #3

Introduced by: **Essex County Medical Society**
Subject: **Third-Party Reviewers**
Referred to: **Reference Committee "C"**

Whereas, the third-party reviewer "hassle factor" increasingly is becoming difficult to deal with for physicians; and

Whereas, insurance companies are using out-of-state reviewers for precertification and concurrent review of hospitalized patients via the telephone; and

Whereas, the State Board of Medical Examiners has taken the position that reviewing charts is the practice of medicine; and

Whereas, some states, i.e. Kansas, have enacted laws requiring physician reviewers to be licensed in their particular state; now therefore be it

~~**Resolved,** that the Medical Society of New Jersey petition the State Board of Medical Examiners to rule that all review in the state of New Jersey be done by New Jersey licensed physicians.~~

Resolved, that the Medical Society of New Jersey petition the State Board of Medical Examiners and the New Jersey Department of Insurance to rule that all quality and utilization review of medical charts of patients treated in the state of New Jersey must be done by New Jersey licensed physicians.

[redacted]

The Reference Committee recommended that Resolution #3 be amended to read as follows:

Resolved, that MSNJ petition the State Board of Medical Examiners to rule that all quality and utilization review of medical charts in the state of New Jersey must be done by New Jersey licensed physicians with the appropriate specialty designation.

The Reference Committee recommended that Resolution #3 be adopted as amended.

HOUSE ACTION: Not adopted. Resolution #3 was adopted as amended by the House of Delegates.

Resolution #7

Introduced by: **Bergen County Medical Society**
Subject: **Objection to HCFA Administrative Policies**
Referred to: **Reference Committee "C"**

Whereas, the administrative policy of HCFA has become so onerous; and

Whereas, we have found its procedures inconsistent, defective, deficient, and contradictory; and

Whereas, HCFA's actions are inimical to patients' best interests and challenge the integrity of physicians; and

Whereas, the profession is overburdened by administrative regulations; now therefore be it

Resolved, that the Medical Society of New Jersey seek legal redress from the Health Care Financing Administration and its intermediaries.

[redacted]

The Reference Committee felt that Resolution #7 was too vague and since it dealt with a federal agency, it should be addressed by the AMA.

The Reference Committee recommended that Resolution #7 be rejected.

HOUSE ACTION: Adopted. Resolution #7 was rejected.

Resolution #8

Introduced by: **Bergen County Medical Society**
Subject: **Objection to Physician Requirement To Fill Out Claims for Medicare Beneficiaries**
Referred to: **Reference Committee "C"**

Whereas, the Omnibus Budget Reconciliation Act (OBRA) of 1989 states that, as of September 1, 1990, all physicians will be required to complete and submit to Medicare all claims for Medicare beneficiaries; and

Whereas, this requirement will be a cumbersome, expensive, and unnecessary chore for most physicians' offices; and

Whereas, this will require additional personnel and extra work without reimbursement for the said items; now therefore be it

Resolved, that the Medical Society of New Jersey urge the American Medical Association to take action either to stop or delay implementation of the Omnibus Budget Reconciliation Act (OBRA) of 1989 requirement that physicians complete claims for Medicare beneficiaries.

[redacted]

Because of their similar intent, the Reference Committee combined consideration of Resolutions #8 and #11. The Reference Committee felt that Resolution #11 more clearly defined the issues.

The Reference Committee recommended that Resolution #8 be rejected.

HOUSE ACTION: Adopted. Resolution #8 was rejected.

Resolution #9

Introduced by: **Bergen County Medical Society**
Subject: **Objection to Malpractice Surcharge**
Referred to: **Reference Committee "C"**

Whereas, the New Jersey Medical Malpractice Reinsurance Association deficit is solely the result of improper and irresponsible policies of the New Jersey State Department of Insurance; and

Whereas, the surcharge is an unjust and arbitrary taxation of the medical profession; now therefore be it

Resolved, that the Medical Society of New Jersey continue to use every possible means to overturn the malpractice surcharge regulation of the New Jersey Department of Insurance and use legal counsel to pursue to the highest court.

[redacted]

The Reference Committee recommended that Resolution #9 be adopted.

HOUSE ACTION: Adopted. Resolution #9 was adopted.

Resolution #10

Introduced by: **Bergen County Medical Society**
Subject: **Limited Endorsement of Suppliers of Membership Services**
Referred to: **Reference Committee "C"**

Whereas, many members have been dissatisfied with the position of the Medical Society of New Jersey in recommending only one insurance company and/or legal firm for membership services; now therefore be it

Resolved, that the Medical Society of New Jersey Board of Trustees, through the Committee on Membership Services, offer three alternatives to all Society-endorsed programs, with the exception of the programs from the Medical Inter-Insurance Exchange of New Jersey.

[redacted]

There was extensive discussion on Resolution #10. Statements were made that exclusivity allows the suppliers of services to offer a better rate and makes for better accountability. The Reference Committee felt that physicians should weigh all options available to them and act on the basis of enlightened self-interest.

The Reference Committee recommended that Resolution #10 be rejected.

HOUSE ACTION: Adopted. Resolution #10 was rejected.

Resolution #11

Introduced by: **Union County Medical Society**
Subject: **Medicare Billing**
Referred to: **Reference Committee "C"**

Whereas, the 1989 Omnibus Budget Reconciliation Act (OBRA) requires that as of September 1, 1990, physicians must submit all health care claims for Medicare patients for whom they do not accept assignment; and

Whereas, this process is a major intrusion into the long-established doctor-patient relationship; and

Whereas, this process would require a considerable increase in office personnel to accomplish this procedure and answer inquiries—many of which would be due to errors by the Medicare carriers; and

Whereas, this shift of paperwork from the Medicare intermediary and the patient to the physician's office would apparently be achieved without additional compensation to the physician; now therefore be it

Resolved, that the Medical Society of New Jersey petition the New Jersey congressional delegation to help to rescind the provision of the 1989 Omnibus Reconciliation Act (OBRA) requiring physicians to submit all claims for Medicare patients ~~for whom they do not accept assignment;~~ and be it further

Resolved, that the AMA be requested to take a position of strong opposition to this provision; and be it further

Resolved, that the AMA petition Congress to change this provision.

[redacted]

Because of their similar intent, the Reference Committee combined consideration of Resolutions #8 and #11. The Reference Committee felt that Resolution #11 more clearly defined the issues.

The Reference Committee recommended that the words "for whom they do not accept assignment" in the first resolved of Resolution #11 be deleted.

The Reference Committee recommended that Resolution #11 be adopted as amended.

HOUSE ACTION: Adopted. Resolution #11 was adopted as amended by the Reference Committee.

Resolution #12

Introduced by: **Union County Medical Society**
Subject: **Prescriptions in Nursing Homes**
Referred to: **Reference Committee "C"**

Whereas, nursing home facilities are strictly regulated by state and federal laws; and

Whereas, physicians are licensed to practice medicine in the state of New Jersey; and

Whereas, physicians are additionally credentialed to practice in hospitals and nursing homes; and

Whereas, "interpretive guidelines for drug therapy in nursing home facilities" encroach upon physicians and their ability to practice in a nursing home facility; now therefore be it

Resolved, that the prescribing of medications should be based on the best interests of a particular patient as perceived by the attending physician; and be it further

Resolved, that the needs of the patient should be the sole determinant of the type of medication prescribed, and not a bureaucratic cookbook of treatments; and be it further

Resolved, that the Medical Society of New Jersey convey ~~this position~~ *these concerns* to the State Board of Medical Examiners, the New Jersey State Department of Health, and any related agencies regulating or impacting on the regulating of nursing home facilities.

[redacted]

The Reference Committee recommended that Resolution #12 be amended (amendments in italics).

HOUSE ACTION: Adopted. Resolution #12 was adopted as amended by the Reference Committee.

Resolution #17

Introduced by: **Ocean County Medical Society**
Subject: **Frivolous Suits**
Referred to: **Reference Committee "C"**

Whereas, many malpractice suits are without merit and frivolous; and

Whereas, such suits that fail or are dropped, nevertheless harm the defendant and increase the cost of malpractice insurance; and

Whereas, no mechanism exists to bring this situation to the attention of the public; now therefore be it

Resolved, that physicians submit documentation of such frivolous cases to the Medical Society of New Jersey; and be it further

Resolved, that if the Medical Society of New Jersey concurs, letters of opinion and admonition be sent to the plaintiff's attorney; the insurance carrier; and the New Jersey Bar Association.

Resolved, that the Medical Society of New Jersey request the Medical Inter-Insurance Exchange of New Jersey to submit quarterly reports to MSNJ's Board of Trustees with analyses of those malpractice cases that have been dismissed without merit as well as those cases in which the jury verdict was in favor of the physician defendant with recommendation as to whether plaintiff's attorney may not have followed acceptable legal standards.

[redacted]

There was considerable discussion on Resolution #17. The Reference Committee felt that the second resolved was not appropriate.

The Reference Committee recommended that the second resolved be deleted.

Doctor Frank J. Malta, delegate from Ocean County, suggested the addition of a third resolved.

The Reference Committee recommended that Resolution #17 be adopted as amended.

HOUSE ACTION: Not adopted. Resolution #17 and suggested amendment (third resolved) were referred to the Board of Trustees.

Resolution #18

Introduced by: **Ocean County Medical Society**
Subject: **Replacement of Medicare Carrier**
Referred to: **Reference Committee "C"**

Whereas, Pennsylvania Blue Shield has not provided physicians with comprehensive documentation of its rationale for denial of payment for services; and

Whereas, physicians are unable to predict and to avoid denial of payment notices, at great embarrassment to physician and patient; and

Whereas, Pennsylvania Blue Shield has been unremitting in the denial of payment for surgical assistance, in spite of State Board of Medical Examiners and hospital regulations and the needs of the safe performance of surgical procedures; and

Whereas, Pennsylvania Blue Shield generally has been inefficient as a Medicare carrier, unnecessarily encumbering physicians with reams of documentation; now therefore be it

Resolved, that the Medical Society of New Jersey petition the Health Care Financing Administration to replace Pennsylvania Blue Shield as the Medicare carrier for the state of New Jersey.

The Reference Committee took cognizance of the heated discussion on Resolution #18.

The Reference Committee recommended that Resolution #18 be adopted.

HOUSE ACTION: Adopted. Resolution #18 was adopted.

Resolution #19

Introduced by: **Ocean County Medical Society**
Subject: **Qualifications of Experts in Medical Malpractice Cases**
Referred to: **Reference Committee "C"**

Whereas, the credentials of medical experts are included in testimony given in malpractice action; and

Whereas, there have been incidences of false testimony or testimony at odds with medical knowledge by experts; and

Whereas, medical experts impact the outcome of malpractice actions; now therefore be it

Resolved, that the Medical Society of New Jersey establish guidelines to be used by the courts for the credentialing of medical experts and behavior of medical experts; and be it further

Resolved, that an ad hoc committee be so constituted to advise the Board of Trustees; and be it further

Resolved, that such recommendations be forwarded to appropriate legal organizations and judiciary bodies in the state of New Jersey.

The Reference Committee recommended that Resolution #19 be adopted.

HOUSE ACTION: Not adopted. Resolution #19 was adopted as amended by the House of Delegates (with the addition of the second resolved).

Resolution #20

Introduced by: **Ocean County Medical Society**
Subject: **Formation of a Counter Litigation Society**
Referred to: **Reference Committee "C"**

Whereas, malpractice actions or potential actions have affected the manner in which medicine is practiced today; and

Whereas, consequences of malpractice actions have dire effects upon practitioners; and

Whereas, malpractice actions may be initiated on the basis of poor medical outcome, hired medical experts whose testimony is not supported by the facts or whose testimony is at odds with medical knowledge, and/or the filing of a frivolous suit; and

Whereas, such actions have profound psychological and adverse effects on the reputations of practitioners; now therefore be it

Resolved, that the Medical Society of New Jersey support the formation of an organization whose purpose is to take appropriate action in all cases of alleged malpractice by its members in which the allegations are not supported by subsequent legal action; such action is to be taken against the plaintiff, the attorneys, and/or the medical experts.

In view of the previous action recommended on Resolution #17, the Reference Committee did not support the adoption of Resolution #20.

The Reference Committee recommended that Resolution #20 be rejected.

HOUSE ACTION: Adopted. Resolution #20 was rejected.

Resolution #21

Introduced by: **Ocean County Medical Society**
Subject: **Clarify Medicare Definition of Medically Unnecessary Services**
Referred to: **Reference Committee "C"**

Whereas, Public Law 99-509 prohibits nonparticipating physicians from billing Medicare patients for services determined by the carrier to have been medically unnecessary; and

Whereas, the Health Care Financing Administration, through the Secretary of the Department of Health and Human Services, has failed to provide physicians with guidelines for noncovered services or for services deemed medically unnecessary; and

Whereas, such noncovered services and medically unnecessary services provided in good faith may have dire consequences to physicians providing medical care to Medicare recipients; now therefore be it

Resolved, that the Medical Society of New Jersey, through its delegates to the American Medical Association (AMA), seek to obtain, through amended legislation if necessary, that guidelines be promulgated for Medicare recipients as to noncovered services as well as guidelines as to what may not be considered as medically necessary; and be it further

Resolved, that established appeal processes be made known to Medicare recipients and physicians in a timely fashion prior to the issuing of a preliminary consideration for denial as well as the procedure to follow in a formal appeal; and be it further

Resolved, that such guidelines and appeal processes should be stated in language that easily is understood.

[redacted]

The Reference Committee felt that MSNJ should continue with its present course of action with respect to this issue.

The Reference Committee recommended that Resolution #21 be adopted.

HOUSE ACTION: Adopted. Resolution #21 was adopted.

Resolution #26E

Introduced by: **Bergen County Medical Society**
Subject: **Medicare Physician Toll-Free Telephone Service**
Referred to: **Reference Committee "C"**

Whereas, the Health Care Financing Administration transferred the carrier functions from the Prudential in New Jersey to Pennsylvania Blue Shield in Pennsylvania; and

Whereas, Pennsylvania Blue Shield and the Health Care Financing Administration has provided a telephone toll-free service for physicians to facilitate answering inquiries about Medicare Part B benefits, claims processing procedures, amounts of claim payments or reasons for denial, and claim status; and

Whereas, each physician inquiry requires an extensive amount of telephone time for resolution; and

Whereas, by discontinuing the telephone toll-free service, effective June 30, 1990, toll calls to Pennsylvania are unfair and would place an additional financial burden on physicians; now therefore be it

Resolved, that the Medical Society of New Jersey take action to urge Pennyslvania Blue Shield and the Health Care Financing Administration to continue the toll-free service to the physicians in New Jersey; and be it further

Resolved, that the Medical Society of New Jersey take action to urge Pennsylvania Blue Shield and the Health Care Financing Administration to provide telephone numbers in either area codes (201) and/or (609) for New Jersey physicians' use in communicating with the Medicare center.

The Reference Committee recommended that Resolution #26E be adopted.

HOUSE ACTION: Not adopted. Resolution #26E was adopted as amended by the House of Delegates (with the addition of the second resolved).

Council on Public Relations

JOSEPH N. MICALE, MD, CHAIRMAN

(Reference Committee "D")

The Council on Public Relations studied a number of projects in conjunction with the suggestions offered by the House of Delegates, the Board of Trustees, the general membership, and individual contributions made by members of the Council on Public Relations, as well as legislative public relations campaign contributions from Katz Martin & Company.

1. **Resolution and Recommendations—1989.** From the House of Delegates, Board of Trustees, Council on Public Relations, membership, and executive director of the Medical Society of New Jersey.

A. A specific mandate from the House of Delegates was Resolution #5, a recommendation that MSNJ sponsor television public service announcements and news releases to educate the public on proper waste disposal habits.

B. The Council reviewed and discussed programming of MSNJ's public relations activities for the 1989 yearly schedule. The development and implementation of media releases followed the Council's review: *Pollution Can Kill; Doctor's Medicare Fees; Medicare, HMOs, DRGs—Government Prescribed Medicine Is Getting Harder and Harder To Swallow; The World Is in Your Hands; Skyrocketing Medical Costs;* and *Professional Liability.*

MSNJ's public relations efforts are directed to present an acceptable image of New Jersey physicians attempting to deliver quality health care to their patients under increasingly difficult conditions, and to encourage the public to make their concerns known to their legislative representatives.

2. **Public Relations Activities—Continuing Projects.**

A. Publication and distribution of the *Membership Newsletter* as part of *NEW JERSEY MEDICINE,* the journal of the Medical Society of New Jersey.

B. Monthly public health/public relations releases in the media, primarily newspapers and magazines (*Time/Newsweek*).

C. There were 30-second public service television releases on pollution control developed from our media releases.

D. Preparation and distribution of special news releases and publicity as required in furtherance of the Society's interest and activities including: Annual Meeting, selected official programs, and special activities.

E. The Golden Merit Award Ceremony at which MSNJ senior physicians who have held the degree of doctor of medicine for 50 years receive formal recognition from their peers for devotion to their profession and the patients they have faithfully served.

F. Support of orientation programs for new members by component societies.

G. Placement services in *NEW JERSEY MEDICINE.*

H. Participation in medical television programs of informational value to the public—Channel 9-13 (cable) plus commercial stations in New York and Philadelphia using doctors from our specialty societies as speakers, plus political action program support.

I. Newspapers. This year MSNJ published multiple releases on health topics such as: *Pollution Can Kill; Doctor's Medicare Fees; Medicare, HMOs, DRGs—Government Prescribed Medicine Is Getting Harder and Harder To Swallow; The World Is in Your Hands; Skyrocketing Medical Costs;* and *Professional Liability.*

J. Television. Public service announcements continue to be aired out of New York and Philadelphia commercial stations and New Jersey Network Public Broadcasting television, using 15- to 30-second television tapes on *Pollution Can Kill.*

3. **Special Programing.**

A. The Council on Public Relations recommended three proposed releases on DRGs, health care costs, and senior medical courtesy programs be developed and reviewed for use in doctors' offices. County medical societies were solicited for their interest—Camden, Essex, Monmouth, Ocean, and Passaic Counties responded.

B. Participation on Governor's Committee on Child Abuse.
C. Support of Eye Health Screening Promotion.
D. Public relations support of legislative activities by Katz Martin & Company.
E. Development of annual public relations brochure for membership information.

[redacted]

The Reference Committee recommended that the report be filed.
HOUSE ACTION: Adopted. The report was filed.

Council on Legislation

IRVING P. RATNER, MD, CHAIRMAN

(Reference Committee "D")

This report presents a summary of the ultimate status of legislative measures of the 203rd Legislature. The Council's operations, together with a cumulative report of MSNJ's official positions on current legislation, are reflected regularly in the official bulletins dispatched to state legislative keymen and to component societies, and in items published in the *Membership Newsletter* in *NEW JERSEY MEDICINE,* the journal of the Medical Society of New Jersey.

The Council on Legislation continues to invite an official representative from each specialty society to all Council meetings. A notice announcing the date of each of the Council's meetings also is sent to all MSNJ official intermediaries with New Jersey specialty societies.

The Council urges that more representatives attend its meetings so it may have the benefit of the timely thinking of specialty societies concerning proposed legislation affecting the specialty fields.

The Council also invites the chairman or representatives of each council and standing committee to attend the legislative meetings. Recent bylaw amendments make it possible for one Auxiliary member, one resident member, and one student member appointed by the president, to serve on the administrative councils and committees for a one-year term to be full voting members of the representative council and committees.

There are special sections in *NEW JERSEY MEDICINE* dealing with legislative and regulatory updates. The status of all active MSNJ legislative matters is detailed.

The following is a list of bills of the 1988 to 1989 Legislature that were reviewed after the meeting of the 1989 House of Delegates:

SENATE/ASSEMBLY (Active)

S-722—Codey—Mental Health Coverage. Requires health insurers (hospital service corporations) to provide coverage for mental illnesses. ***Active Support.***

S-723—Codey—Mental Health Coverage. Requires health insurers (medical service corporations) to provide coverage for mental illnesses. ***Active Support.***

S-724—Codey—Mental Health Coverage. Requires health insurers (commercial group health) to provide coverage for mental illnesses. ***Active Support.***

S-725—Codey—Mental Health Coverage. Requires health insurers (commercial individual health) to provide coverage for mental illnesses. ***Active Support.***

S-726—Codey—Mental Health Coverage. Requires health insurers (HMOs) to provide coverage for mental illnesses. ***Active Support.***

S-727—Codey—Mental Health Coverage. Requires health insurers (health service corporations) to provide coverage for mental illnesses. ***Active Support.***

S-3440—Codey—Generic Substitution/Prescription Blank Change. Changes prescription forms to facilitate use of generic drugs. ***Active Opposition,*** filling out the new prescription format would require more time for physicians; the probability of forgetting to write the required words to override generics was greater when using a blank form and, therefore, the new format would not be in the best interest of patients.

S-3494—Zane—Unemployment Compensation and Disability Benefits. Exempts physicians who are independent contractors from employment and disability taxes. Clarifies an ambiguity in the current law. ***Active Support.***

S-3549—Lynch—Optometric Use of Drugs. Permits optometrists to use drugs for diagnostic and treatment purposes. ***Active Opposition,*** optometrists are not medical doctors and, therefore, should not be given the mandate, via legislation, to administer drugs. If the wrong medication is prescribed, what appears to be a simple problem could develop into a destructive process of the eye in a very short period of time. The bill is shortsighted in attempting to provide less expensive care to the general public to the detriment of their health.

A-4259—Naples—Medical Records. Would require that records be "furnished upon request to the patient and/or his duly authorized representative immediately." ***Active Opposition,*** this situation is adequately covered under existing regulation and could not be implemented in the form stated in the bill.

SENATE/ASSEMBLY (Monitor)

S-734—Codey—Financial Disclosure. Prohibits physician from referring patients for services in which the physician or his immediate family hold a significant ownership interest unless the patient is advised, in writing, and given the option of a prescription. ***Conditional Approval,*** pending disclosure is expanded to all providers. (Law c.19, P.L. 1989.)

S-2939—Van Wagner—Emergency Services. Appropriates $1.5 million to the Department of Health to be used for EMS training and equipment. ***Approved.***

S-3104—Lipman—AIDS. Makes AIDS or HIV sensitivity reportable to the Department of Health and provides for confidentiality. ***Action Deferred,*** pending review of the Task Force on AIDS of the Assembly amendments to S-3104. (Law c.303, P.L. 1989.)

S-3236—Rice—AIDS. Requires that persons convicted for using controlled dangerous substances shall be tested for AIDS and HIV sensitivity. ***Action Deferred,*** pending reconsideration of the Task Force on AIDS concerning this legislation.

S-3261—Bassano—Drug Testing Student Athletes. Requires school boards to establish random drug testing programs for student athletes. Testing would be done at school board expense. ***Disapproved,*** the issue of drug abuse in the school extends beyond the scope of the student athlete. This bill, therefore, would send the wrong message and ignores the need to educate and test beyond the athlete population.

S-3320—Ambrosio—Health Care Directives. Establishes procedures for the execution of advance directives for health care. The advance directives involve designation of a health care representative and a statement of personal wishes in the event of loss of decision-making capacity. ***Action Deferred,*** pending review of the Senate committee amendments by the Committee on Biomedical Ethics.

S-3327—Codey—Infection Control Education. Requires institutions that educate allied health professionals to incorporate infection prevention and control as part of their program. ***No Action.***

S-3346—Codey—Laboratory Director's Licensing. Adds "diagnostic laboratory immunology" to the list of specialty licenses. ***No Action.***

S-3389—Paterniti—Health Needs Study (same as A-2987). Requires the commissioner of health to conduct a study of the health needs of low-income persons over the age of 60. ***Disapproved,*** this study is unnecessary, there is a wealth of information on this topic available through federal and academic sources.

S-3429—Ewing—Commissioner of Health (same as A-4142). Deletes the requirement of a medical license to be commissioner of health. ***Conditional Approval,*** pending amendment of the bill to create a position of physician general and also to include an MSNJ representative on the Health Care Administration Board.

S-3433—D'Amico—Medical Waste. Increases the categories of regulated medical waste to include—wastes from surgery or autopsy that were in contact with infectious agents, including soiled dressings, sponges, drapes, lavage tubes, drainage sets, underpads, and surgical gloves; laboratory wastes from medical, pathological, pharmaceutical, or other research, commercial, or industrial laboratories that were in contact with infectious agents, including slides and cover slips, disposable gloves, laboratory coats, and aprons; dialysis wastes that were in contact with the blood of patients undergoing hemodialysis, including contaminated equipment and supplies such as tubing, filters, disposable sheets, towels, gloves, aprons, and laboratory coats; discarded medical equipment and parts that were in contact with infectious agents; biological waste and discarded materials contaminated with blood, excretion, exudates or secretion from human beings or animals who are isolated to protect others from communicable diseases. ***Disapproved, w/Active Opposition if the bill moves,*** until the current law is effectively implemented.

S-3463—Contillo—HIV Testing for Certain Defendants. Mandates HIV testing when any criminal commits an offense that results in a victim or third party exchanging body fluids or a needle stick if there is probable cause to believe the defendant is an intravenous drug user. ***Action Deferred,*** pending further information from the Task Force on AIDS with the following recommendation that the bill be amended to read "that any person who is charged with a criminal offense that results in the victim or a third party exchanging body fluids should be tested for HIV positivity."

S-3479—Zimmer—Hospital Uncompensated Care Charges. Requires hospital to itemize uncompensated care costs on patient bills. ***No Action.***

S-3546—Feldman—Sexually Abused Children. Requires the commissioner of human services to establish two regional treatment centers for sexually abused children. The regional centers would be networked into community-based model programs and a research institute at one of the schools of higher education. ***No Action.***

S-3565—Ewing—HIV Testing of Newborns. Requires that all newborns be tested for HIV sensitivity. ***Action Deferred,*** pending further information from the Task Force on AIDS with the following recommendations: 1. consider HIV testing of mother; 2. consider the possibility of HIV testing of all prenatal patients; and 3. consider false negative and false positive readings and what should be done in these instances.

A-955—Kern—Artificial Insemination. Statutorily regulates artificial insemination, requires certain forms of consent, data gathering, and recordkeeping. ***No Action.*** The Council directed that correspondence be addressed to the sponsor of the bill recommending that it be written in conformance with the American Fertility Society Guidelines.

A-1456—Kline—Organ Transplants. Prohibits organ transplants unless the tissues are HIV negative. ***Approved.***

A-2938—Ogden—Communicable Disease. Requires health care facilities to notify first aid, ambulance, or rescue squads that the patient they are transporting has a communicable disease when that fact is known to the facility. ***Approved.***

A-2987—Lobiondo—Health Needs Study (same as S-3389). Requires the commissioner of health to conduct a study of the health needs of low-income persons over the age of 60. ***Disapproved,*** this study is unnecessary; there is a wealth of information on this topic available through federal and academic sources.

A-3804—Littell—Ambulance, Fire, Rescue Squads. Prohibits the formation of local, regional, or statewide EMS coordinating areas. ***Approved.***

A-4224—Girgenti—Anabolic Steroids. Makes it a crime to dispense steroids without a prescription to minors; requires the commissioner of health to conduct studies to determine whether anabolic steroids should become scheduled drugs. ***Conditional Approval,*** pending deletion of the words "to minors," making it a crime to dispense steroids without a prescription. Also, pending notification that anabolic steroids will not be added to the controlled schedule II listing (Law c.335, P.L. 1989).

A-4226—Bush—Fetal Alcohol Syndrome (FAS) (same as S-3149). Requires retail establishments (alcohol) to post warnings about alcohol consumption during pregnancy. ***Approved.***

A-4255—Palaia—Tanning Salons (same as S-1554). Requires the Department of Health to establish safety standards for tanning facilities that shall be enforced through the local board of health. ***Approved.***

A-4284—Impreveduto—Chiropractic Board. Creates a separate Board of Chiropractic Examiners and transfers all current rules to the new board. ***No Action.***

A-4299—Kline—HIV Testing (Newborns). Requires that all newborns be tested for HIV sensitivity under Department of Health guidelines. ***Action Deferred,*** pending further information from the Task Force on AIDS with the following recommendations: 1. consider HIV testing of mother; 2. consider the possibility of HIV testing of all prenatal patients; and 3. consider false negative and false positive readings and what should be done in these instances.

A-4321—Cooper—HIB. Requires the Department of Health to distribute information to physicians on HIB vaccine. ***No Action.***

A-4382—Karcher—Video Terminals in Workplace. An employer shall make available to an operator an annual eye and vision examination that conforms to the recommended components of an eye and vision examination established by the American Optometric Association, with consideration given to the specific requirements of visual correction that may be needed by an operator. ***No Action.***

A-4453—Smith—HIV Positive Psychiatric Patients. Provides that patients who are in state psychiatric facilities and are HIV positive are to be isolated in accordance with policies approved by the commissioner of human services and the commissioner of health. ***Action Deferred,*** pending further information from the Task Force on AIDS, the Council on Mental Health, and the New Jersey Psychiatric Association.

A-4536—Randall—Health Care Directives. Establishes procedures for the execution of advance directives for health care. The advance directives involve designation of a health care representative and a statement of personal wishes in the event of loss of decision-making capacity. ***Action Deferred,*** pending further information from the Committee on Biomedical Ethics.

A-4560—Franks—Motor Vehicle Drivers—Drug Testing. Requires the Division of Motor Vehicles to establish a three-year random sample drug testing program for applicants for a driver's license. ***Disapproved,*** the cost of this legislation would make implementation of the bill very difficult.

A-4576—McEnroe—Graduate Medical Education. Adds the dean of the School of Graduate Medical Education at Seton Hall to the Advisory Council on Graduate Medical Education. ***No Action.***

A-4577—Villapiano—Emergency Medical Transportation Services. Requires the Department of Health to notify county health departments of all persons residing in the county that are HIV positive. The county health department is to pass the list on to each EMS transport provider. A similar notice by hospitals is to be given to EMS transport when an HIV positive patient is leaving that hospital by EMS transport. ***Disapproved,*** unenforceable, unworkable legislation.

A-4683—Zecker—HMO-Medicare. Requires HMOs that offer services to Medicare recipients to provide supplemental coverage in accordance with the Federal Catastrophic Coverage Act. ***No Action.***

A-4684—Zecker—Medicare-Medical, Hospital, and Service Corporations. Same as A-4683 applies to Blue Cross & Blue Shield. ***No Action.***

A-4685—Zecker—Medicare-Health Insurers. Same as A-4683 applies to health insurers. ***No Action.***

Of the bills reported to the House from the First and Second Sessions of the 203rd Legislature, the following were signed into law:

ACTIVE SUPPORT

S-2673—Corporate Immunity. Provides that officers and directors are immune from suits by members or shareholders when acting in good faith unless there is a material conflict of interest.

S-2936—The Professional Medical Conduct Reform Act. This legislation will substantially change the operation of the New Jersey State Board of Medical Examiners. The enactment of this law is a major advance in securing due process and fundamental fairness for physicians.

S-3867—Medical Waste Fees. Imposes limitations on annual fees the Department of Environmental Protection may charge and collect from medical waste generators.

Under 50 lbs/yr	$100
50-200 lbs/yr	$300
Over 200-300 lbs/yr	$500
Over 300-1,000 lbs/yr	$1000
Over 1,000 lbs/yr	$3500

The DEP must refund the difference between what it collected and what is due under the new rate table. Refunds must be made by July 2, 1990.

ACTIVE OPPOSITION

S-784—Allows psychologist to certify disability.

A-3269—Provides that chiropractors' services are included in the definition of medical services under workers' compensation. (Chiropractic services have been included under workers' compensation allowances for over 20 years.)

APPROVED

S-1980—Provides that volunteer trustees of nonprofit corporations may be immunized from paying damages to the corporation or its membership.

S-1984—This bill deletes the requirement in the law that a completed organ donation option certificate be attached to a death certificate in order for the death certificate to be deemed complete. This bill is necessary in order to ensure the prompt handling of the deceased once a death certificate is prepared.

S-1995—Provides that volunteers providing services to blood banks shall be immune from civil liability unless they have acted in a willful, wanton, or grossly negligent fashion.

S-2343—Creates a medical waste disposal system whereby needles, syringes, and blood products would have to be disposed of by special permit. Physicians, as generators, would be required to register with the DEP.

S-2907—Extends hospice coverage to Medicaid.

S-3076—Requires school boards to distribute Heimlich maneuver educational materials.

S-3315—Expands substance abuse education to include anabolic steriods and further provides for testing and referral for treatment.

A-546—Provides that students in public colleges must produce a medical history of their immunizations for preventable diseases.

S-4329—Allows eye bank technicians and other medical students to enucleate eyes.

DISAPPROVED

S-1554—Requires the Department of Health to establish safety standards for tanning facilities that shall be enforced through the local boards of health.

S-1816—Prohibits the distribution and sale of irradiated foods.

A-130—Provides that a licensed ophthalmic dispenser may certify successful completion of the required visual examination for an operator's license.

A-1774—Creates a 24-member Governor's Council on Alcoholism and Drug Abuse and merges the existing Division of Alcoholism and the Division of Narcotic and Drug Abuse Control within the Department of Health into a new Division of Alcoholism and Drug Abuse Control. It would coordinate all programs within the state and make program and funding recommendations to the governor and the Legislature. The governor is to appoint an independent evaluator who would conduct a study and file a report on the efficacy of the Council four years after enactment of the legislation.

A-1843—Details the rights of patients in acute-care hospitals.

At the close of the 1988-1989 Legislative year, all of the bills expired except those signed into law, vetoed, or filed by the Governor.

1989 HOUSE OF DELEGATES

Resolution #4—Tanning Salon Legislation

Resolved, that the Medical Society of New Jersey work with the New Jersey Department of Health, the Dermatological Society of New Jersey, and other appropriate agencies to determine what safety precautions are needed regarding tanning salons in New Jersey, and whether or not legislation similar to California law is advisable.

The Council on Legislation advised that the appropriate correspondence has been forwarded to review the hazards presented by tanning salons in New Jersey.

[redacted]

The Reference Committee recommended that the report be filed.

HOUSE ACTION: Adopted. The report was filed.

Supplemental Report #1

Legislation

IRVING P. RATNER, MD, CHAIRMAN

(Reference Committee "D")

At 12 o'clock noon, Tuesday, January 9, 1990, the Senate and General Assembly met for organization of the First Annual Session of the 204th New Jersey State Legislature. As the Legislature presently is constituted, the Senate has a total of 40 members consisting of 17 Republicans and 23 Democrats. The Assembly has a total of 80 members consisting of 36 Republicans and 44 Democrats. By means of official legislative bulletins, the Society's official legislative positions on all current state legislation are regularly called to the attention of legislators as well as component societies, cooperating agencies, county keymen, and county society executive directors and executive secretaries.

The Society has adopted the following regular range of official positions concerning proposed legislation:

Watch List: For all **Approved/Disapproved** legislation.

Active Support: All-out support for the measure.

Active Opposition: All-out opposition for the measure.

Note and File: For all **No Action** legislation.

Conditional Approval: To indicate that the approval of the Society is conditional, subject to elimination of the unsatisfactory elements of the bill that are pointed out.

Action Deferred: Pending amendment that will have substantial impact on **Active support/Active Opposition** legislation.

The Council offers this Supplemental Report #1 covering items dealt with since the compilation of its Annual Report.

SENATE/ASSEMBLY (Active)

S-642—Ewing—Commissioner of Health. Deletes the requirement of a medical license to be commissioner of health. ***Active Opposition,*** because the health care needs of our population require that a licensed physician serve in the position of commissioner of health. There are many qualified candidates. It is not advisable to dilute the requirements at a time when the nation and New Jersey, in particular, face a major public health crisis, caused by drug addiction, AIDS, and environmental diseases.

S-1025—Feldman—Social Work. This bill would establish and license two categories of social workers and would create a Board of Social Work Examiners in the Department of Law and Public Safety whose powers and duties, among others, would be to administer the act, examine and license candidates for the various categories of social work, and promulgate rules and regulations necessary for the effective enforcement of the act. The two categories of licensed social work would be (1) social work specialists, who would be required to have a doctorate in social work or a master's degree from an accredited school of social work and (2) social workers who would need a baccalaureate degree from an accredited college or university social work or social welfare program. The bill would "grandfather" in all persons currently in practice, provided they have been in practice in one of the two licensed categories for two of the last five years and apply to be licensed within 180 days from the effective date of this act. ***Active Opposition,*** because there has been no demonstrative need for licensure of this occupation as a separate and independent profession.

S-1208—Ambrosio—Declaration of Death. Sets forth the criteria to be recognized for a declaration of death. Neurological criteria may not be used if they violate the personal religious beliefs or moral convictions of the individual. ***Active Opposition,*** pending amendment removing the religious exemption section of the bill.

S-1230—Codey—Certificate of Need. Amends the certificate of need law to include physicians whenever a health service has been regionalized by regulation of the Department of Health. Regulations would terminate within three years, at which time the commissioner could readopt the regulation. ***Active Opposition,*** there is no evidence the certificate of need concept is a valid regulatory system. It has proved to be ineffective in containing costs; it has stifled initiative; its expansion to intrude on the private practice of medicine is not warranted. Nationally, at least 11 states have repealed certificate of need legislation and a number of federal agencies (including the Department of Health and Human Services and the Federal Trade Commission) have called for its repeal.

S-1272—Codey—Generic Substitution/Prescription Blank Change. Changes prescription forms to facilitate use of generic drugs. ***Active Opposition,*** generic substitution is a questionable concept that must not be advanced without safeguards and testing. Generic drugs have not been tested through FDA approved clinical trials. At this time, the FDA is reviewing the generic issue. Liberalization of the generic law is not indicated at this time.

S-1556—Cardinale—Certificate of Need. Exempts the private practice of medicine from the certificate of need law. ***Active Support.***

S-1587—Cardinale—Determination of Death. Establishes criteria and determination of death. Creates a religious belief exemption regarding neurological factors. ***Active Opposition,*** pending amendment removing the religious exemption section from the bill.

S-1864—Dumont—Statute of Limitations. Provides for a three-year statute of limitations, except for fraud, intentional concealment, or nontherapeutic or diagnostic purpose. Minors would have until age 11 on any injury prior to age 8. ***Active Support.***

S-1975—Orechio—Medicare Assignment. Requires health care licensees to accept Medicare determination of their fees. ***Active Opposition,*** participation in any health plan is not a valid licensure criteria, there is no evidence that a draconian measure of this nature is necessary since over 70 percent of the physicians accept assignment in a given instance. The bill violates the New Jersey and U.S. Constitution.

S-2016—Contillo—National Health Care. Provides for a nonbinding referendum concerning the enactment of a national health plan. ***Active Opposition,*** the bill presents a utopian approach and does not consider the negative impact of failing to balance cost and quality factors. It is misrepresentation in the purest form.

S-2051—Codey—Dispensing of Drugs by Physicians. Prohibits physicians from dispensing more than a 72-hour supply of drugs unless they are dispensed free of charge. ***Active Opposition,*** limits physician ability to treat patient properly.

S-2100—Lipman—Nursing Practice. Authorizes nurses to practice medicine and to prescribe drugs and devices. ***Active Opposition,*** nurses are not qualified to make a medical diagnosis nor to prescribe therapeutic medications.

S-2224—Dalton—Medical Expenses in Auto Accidents. Requires health providers to directly bill auto carriers when there is applicable PIP coverage. ***Active Opposition,*** this would make physicians and patients captives of insurance companies and will lead to limited access for patients.

S-2225—Dalton—Medical Expenses in Workers' Compensation. Requires health providers to directly bill the employer or the compensation carrier whenever workers' compensation insurance is applicable. ***Active Opposition,*** this would make physicians and patients captives of insurance companies and will lead to limited access for patients.

S-2295—Ambrosio—No-Fault. Imposes a fee schedule at the 75 percentile; bans balance billing; places an annual charge of $100 upon the licensee to practice medicine. ***LAW c.8 P.L. 1990.***

S-2329—Lipman—HIV Reporting. Amends recently adopted law and removes HIV sensitivity as a reportable matter. ***Active Opposition,*** reporting of HIV sensitivity and contact tracing are essential to the control of the AIDS epidemic. Additionally, the benefits of prompt treatment of HIV sensitive patients would be frustrated.

SCR-84—Zane—Regulation. Provides constitutional amendment that the legislature by majority vote may override any rule or regulation. ***Active Support.*** (Doctor Weiss voted in the negative and is so recorded.)

A-1—Doria—No-Fault. Revises no-fault. Provides for a $100 per year tax on medical licenses to help offset the JUA deficit, provides for a medical fee schedule at the 75th percentile and a ban on balance billing. ***LAW c.8 P.L. 1990.***

A-234—Naples—Health Care Services. Bars actions to enforce the payment of bills for health care services for 60 days under certain circumstances. ***Active Support.*** (Drs. Rosen and D'Ascoli voted in the negative and are so recorded.)

A-264—Naples—Medical Records. Would require that records be "furnished upon request to the patient and/or his duly authorized representative immediately." ***Active Opposition,*** this situation is adequately covered under existing regulation and could not be implemented in the form stated in the bill without total disruption of hospital and medical services.

A-325—Deverin—Occupational Therapy. Creates a new class of licensed practitioners who would function independently and would be permitted to perform such services as the design, fabrication, and application of splints, sensorimotor activities, the use of specifically designed crafts, guidance in the selection and use of adaptive equipment, therapeutic activities to enhance functional performance; prevocational evaluation and training, and consultation concerning the adoption of physical environments for the handicapped. The State Board of Medical Examiners will exercise jurisdiction. ***Active Opposition,*** there is no demonstrated public health need to create a licensed professional in occupational therapy. Currently, physical therapists and nurses are meeting the needs of this legislation.

A-337—Deverin—Medicaid. Broadens the scope of Medicaid eligibility. ***Action Deferred,*** pending further information from MSNJ's Committee on Medicaid.

A-346—Deverin—Respiratory Therapists. Creates a Board to license and regulate respiratory therapists. Services are to be provided under the direction or supervision of a physician. ***Active Opposition,***

there is no need to separately register and license these therapists since they are functioning well under existing laws.

A-366—Colburn—Corrective Lenses. Prohibits the mail order sale of prescription lenses. ***Active Support.***

A-743—Roberts—Optometric Use of Drugs. Permits optometrists to use and prescribe drugs. ***Active Opposition,*** optometrists are not medical doctors and, therefore, should not be given the mandate, via legislation, to prescribe and administer drugs. If the wrong medication is prescribed, what appears to be a simple problem could develop into destructive process of the eye in a very short period of time. The bill is shortsighted in attempting to expand licensure by legislation rather than education and competence.

A-1540—Girgenti—Structured Payments. Provides for structured settlements when future damages exceed $150,000. ***Active Support.***

A-1645—Shusted—Dialysis Technicians. Creates a system for training and certifying dialysis technicians. ***Active Support.***

A-1653—Shusted—Structured Payments. Provides for structured payments in civil actions against health care providers when future damages exceed $250,000. An annuity must be offered to guarantee the future payments. ***Active Support.***

A-1853—Doria—HMO. Ensures HMO enrollees of a form of coverage when using non-HMO providers. ***Active Support.***

A-1893—Moran—Medicare Fee Complaints. Establishes a public blacklist to be compiled by the Division of Aging on those physicians whose fees exceed Medicare allowances. ***Active Opposition,*** Medicare allowances are about 60 percent of usual fees. Ongoing congressional budget cuts will lower them further. The compiling of a list will mislead patients from realizing that doctors are being paid less than they bill. This type of misinformation should be avoided.

A-1970—Kelly—Prescription of Drugs by Nurses. Allows nurses who practice in collaboration with physicians to prescribe medications in accordance with protocols submitted to and approved by the State Board of Nursing. ***Active Opposition,*** nurses are not qualified to make medical diagnosis nor to prescribe therapeutic medications.

A-2019—Ogden—Mental Health Benefits. Requires health insurers and HMOs to require specified amounts of mental health benefits as mandated coverage. ***Active Support.***

A-2020—Ogden—Mental Health Benefits. Same as **A-2019** except it applies to HMOs. ***Active Support.***

A-2021—Ogden—Mental Health Benefits. Same as **A-2019** except it applies to Blue Cross. ***Active Support.***

A-2022—Ogden—Mental Health Benefits. Same as **A-2019** except it applies to individual commercial insurance. ***Active Support.***

A-2023—Ogden—Mental Health Benefits. Same as **A-2019** except it applies to medical service corporations. ***Active Support.***

A-2024—Ogden—Mental Health Benefits. Same as **A-2019** except it applies to Blue Shield. ***Active Support.***

SENATE/ASSEMBLY (Monitor)

S-23—Russo—Handguns. Prohibits the sale, importation, or possession of handguns with the exception of antiques. ***No Action.*** (Doctor Rosen voted in the negative and is so recorded).

S-61—Zimmer—Emergency Services. Permits paramedics or registered nurses to ride with an EMT-I unit and perform advanced life-support services. ***Approved.***

S-119—Zimmer—Hospital Uncompensated Care Charges. Requires hospitals to itemize uncompensated care costs on patient bills. ***Approved.***

S-184—Graves—Licensure Suspension. Suspends professional, occupational, and business licenses upon conviction for a drug offense. ***Approved.***

S-215—Paterniti—Osteoporosis. Establishes a commission (15 members) to compile and analyze data on osteoporosis, develop educational programs, and assist local health agencies in public education. ***Disapproved,*** osteoporosis is a well known, researched, and publicized condition. There is no need to create a special legislative commission to conduct studies when scientific literature is readily available.

S-240—Paterniti—Health Needs Study. Requires the commissioner of health to conduct a study of the health needs of low-income persons over the age of 60. ***Disapproved,*** this study is unnecessary; there is a large volume of information on this topic available through federal and academic sources.

S-286—Lynch—Political Contributions. Amends the New Jersey election contribution laws. Limits PAC contributions per candidate per election year. Also caps PACs at $100,000 per calendar year. ***No Action.***

S-317—Rand—Burn Registry and Reporting. Requires physicians treating a person with burns over 5 percent of his body to report the same to state or local police. Establishes a central burn registry in the Department of Community Affairs. ***No Action.***

S-363—VanWagner—Wrongful Death. Expands recoverable damages in wrongful death actions to include emotional and social factors along with mental anguish. ***Disapproved,*** Supreme Court decisions in New Jersey have established a reasonable and workable format awarding damages in wrongful death actions. This bill would create an unwarranted expansion and escalate the cost of liability insurance without benefit to the public.

S-371—VanWagner—Home Health Care. This bill establishes an 18-month Home Health and Community Care Demonstration Program in the Department of Human Services. This program is designed to provide for the delivery of community-based home health care services by local Home Health and Community Care Demonstration Centers to functionally impaired persons who are at least 65 years of age or older or who are disabled pursuant to the Social Security Act. ***Action Deferred,*** pending further information from MSNJ's Committee on Senior Citizens.

S-385—VanWagner—Immunity. Requires physicians and others to report patients who have made defined threats against third parties to the local police. Grants civil immunity to the reporting practitioner. ***Approved.***

S-393—VanWagner—HMOs. Provides for the licensing and regulation of HMOs through the Department of Insurance and transfers current authority from the Department of Health to the Department of Insurance. Also provides for greater financial oversight. ***No Action.***

S-400—Brown—Ombudsman for Children. Creates an office of ombudsman to monitor services rendered to children through the Department of Human Services. ***No Action.***

S-404—Brown—DYFS Study Commission. Establishes a 15-member commission to study and report on the operation of the Division of Youth and Family Services. ***Conditional Approval,*** pending amendment adding a physician to the commission.

S-434—DiFrancesco—Abuse of Elderly, Disabled, or Incapacitated Persons. Requires every person who has reasonable cause to believe an elderly or disabled person is the victim of abuse or exploitation to report that information to the commissioner of human services or his designee. ***Approved.***

S-584—Ewing—Regulated Professions. Creates a review commission in the Division of Consumer Affairs (five public members and four legislators). The commission would study and evaluate proposed legislation regarding regulated professions and occupations. ***No Action.***

S-608—Ewing—Civil Immunity. Amends the Good Samaritan Act to extend immunity to those responding to emergencies regardless of their lack of volunteer status. ***Disapproved,*** the concept of the Good Samaritan Act would be destroyed by this proposal which is illogical.

S-611—Ewing—AIDS. Requires physicians and hospitals to report patients with AIDS to the local board of health within 24 hours of diagnosis (and does not require reports on patients HIV positive). ***Disapproved,*** impractical and unnecessary, since AIDS is reportable to the Department of Health.

S-612—Ewing—Tattoo Parlors. Authorizes the Public Health Council to regulate sanitary conditions in tattoo parlors. ***Approved.***

S-613—Ewing—AIDS. Requires persons being tested for venereal disease to also submit to testing for AIDS; requires applicants for marriage licenses to be tested for AIDS. ***Approved.***

S-615—Ewing—AIDS (Prison System). Requires inmates in correctional institutions to be tested for AIDS. ***Approved.***

S-624—Ewing—Prisoners/AIDS-HIV Sensitivity. Provides that all prisoners shall be tested for sensitivity to HIV. ***Approved.***

S-638—Ewing—Fetal Alcohol Syndrome (FAS). Requires retail establishments (alcohol) to post warnings about alcohol consumption during pregnancy. ***Approved.***

S-644—Ewing—HIV Testing of Newborns. Requires that all newborns be tested for HIV sensitivity. ***Action Deferred,*** pending further information from the New Jersey Chapter, American Academy of Pediatrics.

S-648—Ewing—Drunk Driving. Reduces drunken driving measurement from 0.10 to 0.08. ***No Action.***

S-670—Costa—Nursing Homes. Requires skilled nursing homes or intermediate care facilities to have at least one registered nurse on duty 24 hours a day. ***Approved.***

S-745—Bubba—Drug Testing. Requires drug testing for scholastic athletes as part of the annual physical examination. ***Disapproved,*** if tests are valid for school students, they should be applied to all students, not just athletes.

S-756—Bubba—Anabolic Steroids. Prohibits the nonprescribed use of anabolic steroids by college athletes. ***Approved.***

S-845—Rice—Hospital Care for Indigents. Permits certain municipalities to require indigent patients to go to the least expensive hospital. ***Disapproved,*** because this legislation would unnecessarily restrict the choice of patients and doctors, produce dangerous delays, and conflict with current statutes.

S-916—Cowan—Council on Disability. Establishes a council on disabilities consisting of 50 persons. The council is to function as the primary planning and advisory body in state government on the interests and needs of those with disabilities. A subcouncil on developmental disabilities with 20 members is created within the overall council. ***Disapproved,*** the structure and function of this council and the process outlined is unwieldy and counter-productive.

S-944—Cowan—Licensing Board Immunity. Expands immunity from antitrust suits to licensing boards to include their actions regarding admittance to a profession, suspension, and revocation of licenses. ***Approved.***

S-969—Cowan—Health Insurance for the Unemployed. Establishes a plan designed to provide health insurance to unemployed New Jersey residents who are unable to obtain other group health insurance coverage. *No Action.*

S-1003—Feldman—Privileged Communication. Extends confidential communications to counselors, masters in psychology, nonlicensed psychiatrists, and social workers. **Disapproved,** since the bill gives psychiatric social workers and nurses the right to practice medicine without requiring demonstrated competence to do so.

[redacted]

The Reference Committee recommended that Supplemental Report #1 be filed, with the exception of the following: S-1272, S-2051, and S-613.

S-1272—Cody—Generic Substitution/Prescription Blank Change. **Active Opposition.** Generic substitution is a questionable concept that must not be advanced without safeguards and testing. Generic drugs have not been tested through FDA-approved clinical trials. At this time, the FDA is reviewing the generic issue. Liberalization of the generic law is not indicated at this time.

The Board of Trustees voted to change the position to **No Action,** provided the bill is amended to use the phrase "brand necessary."

The Reference Committee overwhelmingly supported the original action taken by the Council on Legislation.

HOUSE ACTION: Not adopted. The House of Delegates supported the action taken by the Board of Trustees on May 5, 1990.

S-2051—Cody—Dispensing of Drugs by Physicians. **Active Opposition.** Limits physician ability to treat patient properly. Physicians shall dispense according to existing regulations.

The Board of Trustees voted to change the position to **No Action,** and to seek certain amendments and clarification.

The Reference Committee overwhelmingly supported the original action taken by the Council on Legislation.

HOUSE ACTION: Not adopted. The House of Delegates supported the action taken by the Board of Trustees on May 5, 1990.

S-613—Ewing—AIDS. **Approved.** Requires person being tested for venereal disease also to submit to testing for AIDS; requires applicants for marriage licenses to be tested for AIDS.

The Board of Trustees voted to change the position to **Disapproved,** because mandated testing for HIV sensitivity would discourage this group of patients from seeking necessary treatment.

HOUSE ACTION: The House of Delegates supported the action taken by the Board of Trustees on May 5, 1990.

Supplemental Report #2

Legislation

IRVING P. RATNER, MD, CHAIRMAN

(Reference Committee "D")

The Council offers this Supplemental Report #2 covering items dealt with since the compilation of Supplemental Report #1.

SENATE/ASSEMBLY (Active)

S-1012—Feldman—Medical Malpractice. Provides that within 60 days of filing an action against a physician, the plaintiff must provide an affidavit from an expert that there has been a negligent deviation from the accepted standards of practice. ***Active Support.***

S-1233—Codey—Mental Health Coverage. Requires health insurers to provide coverage for mental illnesses. ***Active Support.***

S-1234—Codey—Mental Health Coverage. Requires health insurers to provide coverage for mental illnesses. ***Active Support.***

S-1235—Codey—Mental Health Coverage. Requires health insurers to provide coverage for mental illnesses. ***Active Support.***

S-1236—Codey—Mental Health Coverage. Requires health insurers to provide coverage for mental illnesses. ***Active Support.***

S-1237—Codey—Mental Health Coverage. Requires HMOs to provide coverage for mental illnesses. ***Active Support.***

S-1238—Codey—Mental Health Coverage. Requires health service corporations to provide coverage for mental illnesses. ***Active Support.***

S-1791—Zane—Unemployment Compensation and Disability Benefits. Exempts physicians who are independent contractors from employment and disability taxes. Clarifies an ambiguity in the current law. ***Active Support.***

S-1810—Bennett—Licensing of Health Professionals. Requires statutory authorization for the licensure or certification of health care practitioners. ***Active Support.***

A-31—Kavanaugh—Commissioner of Health. Changes qualifications for commissioner of health and prescribes qualifications for deputy commissioner of health. ***Active Opposition,*** because the health care needs of our population require that a licensed physician serve in the position of commissioner of health. There are many qualified candidates. It is not advisable to dilute the requirements at a time when the nation and New Jersey, in particular, face a major public health crisis caused by drug addiction, AIDS, and environmental diseases.

A-616—Felice—Contact Lenses. Creates a State Board of Examiners of Ophthalmic Dispensers and Ophthalmic Technicians. Permits that Board to license contact dispensers. ***Active Opposition,*** the fitting of contact lenses exposes patients to certain eye injuries. The task, therefore, requires the care, skill, and experience of optometrists and physicians.

A-1357—Bryant—Warning Labels. Requires warnings about the dangers of alcohol use by pregnant women. ***Active Support.***

SENATE/ASSEMBLY (Monitor)

S-1004—Feldman—Confidentiality of Medical Claims Information. Provides that employers could not review medical claims submitted by employees on claims through the employers' coverage. It assumes that employers discourage claims in order to contain premiums. Applied to Blue Cross. ***Approved.***

S-1005—Feldman—Confidentiality of Medical Claims Information. Same as **S-1004** except it applies to group health insurance. ***Approved.***

S-1006—Feldman—Confidentiality of Medical Claims Information. Same as **S-1004** except it applies to Blue Shield. ***Approved.***

S-1014—Feldman—Gambling. Directs the Department of Health to establish a center for compulsive gambling in Atlantic City or some other appropriate area. ***No Action.***

S-1047—Feldman—Cardiopulmonary Resuscitation (CPR). Requires each local board of education to provide instruction in CPR to all secondary pupils. ***Conditional Approval,*** pending amendment of the bill adding a provision for periodic re-enforcement of CPR education (1 year renewal).

S-1136—Feldman—Sexually Abused Children. Requires the commissioner of human services to establish two regional treatment centers for sexually abused children. The regional centers would be networked into community-based model programs and a research institute at one of the schools of higher education. ***Approved.***

S-1153—McManimon—Acupuncture. Provides that acupuncturists are eligible for reimbursement under Blue Shield contracts if the service is otherwise covered. ***Disapproved,*** the scientific validity of acupuncture has not been clearly demonstrated. It would not be prudent to make it a mandated coverage at this time.

S-1198—McManimon—Acupuncturists. Requires health insurers that pay physicians for acupuncture to pay acupuncturists as well. ***Disapproved*** (same as **S-1153**).

S-1259—Codey—Youth Suicide Prevention. Establishes a youth suicide prevention council in the Department of Human Services. The council shall consist of 12 members. There is no psychiatrist or other physician specified for appointment. ***Conditional Approval,*** pending inclusion of a psychiatric physician and psychiatric pediatrician to the council.

S-1261—Codey—Lupus Registry. Declares lupus a reportable disease and creates a registry within the Department of Health. ***Disapproved,*** already being done on a national level. State Public Health Council has the authority to establish a registry when public health concerns indicate such a necessity.

S-1262—Codey—Lupus Treatment. Creates a lupus treatment demonstration project within the Department of Health with a seven-person advisory committee. ***Disapproved,*** education and treatment program already are being done in physicians' offices throughout the state.

S-1263-Codey—Medical Waste. Provides for rewards for reports that lead to the conviction of illegal medical waste disposers. ***Disapproved,*** bounty systems encourage reckless conduct. If there is validity to the concept, it should first be tested for the crimes of murder, rape, and robbery.

S-1269—Codey—Infection Control Education. Requires institutions that educate allied health professionals to incorporate infection prevention and control as part of their program. ***Disapproved,*** this already is being done as standard curriculum. The Legislature should avoid mandating specific course instruction.

S-1270—Codey—Laboratory Director's Licensing. Adds "diagnostic laboratory immunology" to the list of specialty licenses. ***Disapproved,*** there is no indication that sufficient laboratory function and volume occur for special consideration.

S-1311—Jackman—Medical Education. Permits hospitals to enter into educational agreements for clinical clerkships with any medical school without the prior approval of the State Board of Medical Examiners. ***Disapproved,*** there is no way to authenticate the quality of education in certain foreign medical schools, therefore, the approval of the State Board of Medical Examiners provides a needed and valuable counterbalance.

S-1315—Jackman—Dialysis. Creates a system for training and certifying dialysis technicians. ***Approved.***

S-1326—O'Connor—Nutritionists. Provides for the licensing and regulation of nutritionists through a board of nutrition within the Department of Law and Public Safety. ***Disapproved,*** MSNJ generically is opposed to the creation of new professional boards.

S-1349—O'Connor—Audiologists/Speech Language Pathologists. Requires health insurers that pay physicians for services that can be performed by an audiologist or speech language pathologist to pay those providers as well. ***Approved.***

S-1374—Bassano—School Buses. Requires school buses to be equipped with seat belts or other restraint systems approved by the Division of Motor Vehicles. ***Approved.***

S-1380—Bassano—Mental Health Records. Requires institutions to make available mental health records upon request when the patient is an applicant for a police position or firearm permits. ***Disapproved,*** unnecessary legislation—this situation can be addressed by a release signed by the prospective employee or firearm purchaser.

S-1390—Bassano—Emergency Medical Services. Requires that one EMT be on paid, municipal, or hospital-based ambulances rather than two as currently are required. ***Approved.***

S-1434—Bassano—Drug Testing Student Athletes. Requires school boards to establish random drug testing programs for student athletes. Testing would be done at school board expense. ***Disapproved,*** the issue of drug abuse in the school extends beyond the scope of the student athlete. This bill, therefore, would, send the wrong message and ignore the need to educate and test beyond the athlete population.

S-1547—Cardinale—Monosodium Glutamate. Requires restaurants to notify customers if they use monosodium glutamate in preparation of their food or add it to the food after preparation. Notice would be in writing on, or attached to, the menu. ***Conditional Approval,*** pending inclusion of all papain derivatives. (Doctor Kerlin voted in the negative and is so recorded.)

S-1548—Cardinale—School Health. Requires periodic examinations of school children for obesity. ***Disapproved,*** no special examination is necessary, the annual physical examination does include obesity evaluation.

S-1562—Cardinale—Radiation Protection Commission. Adds two members expert in medical physics and epidemiology to the Radiation Protection Commission. ***Approved.***

S-1568—Cardinale—Marriage License Certificate. Requires applicants to be tested for thalassemia, sickle cell anemia, and Tay-Sachs. The physician must notify the applicants of the test results in writing. ***Disapproved,*** because two far more universal diseases—diabetes and rubella—are not included in the testing and those listed have a limited population susceptibility. The tests themselves would not be medically indicated for a majority of applicants.

S-1570—Cardinale—Alcoholic Beverages. Requires that alcoholic beverages be labeled to advise of potential harm to fetuses when consumed by pregnant women. ***Approved.***

S-1586—Cardinale—Education. Requires public schools with sex education programs to emphasize that abstinence is the best assurance of avoiding sexually transmitted diseases and pregnancy. ***No Action.***

S-1592—Cardinale—Fluoride. Prohibits the addition of fluoride to the water of adult psychiatric facilities that have independent water sources. ***Action Deferred,*** pending further information from MSNJ's Council on Mental Health.

S-1663—Dorsey—Campaign Contributions. Limits PACs to contributions of $2500 in state Assembly and Senate elections. ***Disapproved,*** limiting the amount that a PAC could contribute to a legislative candidate would disadvantage the individuals who pool their resources in a PAC.

S-1664—Dorsey—Lobbyists. Limits lobbyists from expending more than $2,500 annually on any given legislator, the governor, or his staff. ***No Action.***

S-1706—Dorsey—Fetal Deaths. Requires hospitals to advise patients of the options regarding the disposition of fetal remains when death occurred at or beyond 20 weeks of gestation. ***No Action.***

S-1747—Zane—Organ Transplants. Establishes a commission on transplants to allocate transplant services for New Jersey residents. Out-of-state programs are not recognized if the service is available at a New Jersey hospital. ***No Action.***

S-1899—Dumont—Physical Therapy. Requires physical therapy treatment to be given under the supervision of a practitioner authorized to prescribe treatment. "Supervision" is defined as personally monitoring the progress of treatment and includes intermittent observation of treatment sessions. ***Conditional Approval,*** pending amendment of the bill to read—on line 19 after the word treatment insert [shall periodically review the progress of the treatment.] and delete [shall personally monitor the progress of that treatment, including on an intermittent basis, the personal observation of the physical therapy treatment as it is being administered by the physical therapist.].

S-1947—Orechio—Drug Abuse Treatment. Requires health insurers and HMOs to include coverage for drug abuse treatment as for any other illness. ***Approved.***

S-1948—Orechio—Drug Abuse Treatment. Same as **S-1947.** ***Approved.***

S-1949—Orechio—Drug Abuse Treatment. Same as **S-1947.** ***Approved.***

S-1950—Orechio—Drug Abuse Treatment. Same as **S-1947.** ***Approved.***

S-1951—Orechio—Drug Abuse Treatment. Same as **S-1947.** ***Approved.***

S-2003—Orechio—AIDS. Requires the Department of Health to file reports related to ARC, AIDS, and HIV positive patients to local health officers on a regular basis. ***Disapproved,*** local health officers currently have access to these statistics.

S-2053—Lesniak—Audiologists. Allows an audiologist to dispense hearing aids without having to be licensed as a hearing aid dispenser. ***Action Deferred,*** pending further information from the New Jersey Academy of Ophthalmology and Otolaryngology.

S-2183—McNamara—Health Insurance Mammograms. Requires health insurers to provide coverage for mammograms. ***Approved.***

S-2197—Dalton—Health Insurance. Directs health insurers to provide insured with a written statement of the application of the policy to injuries sustained in automobile accidents. ***Approved.***

S-2198—Dalton—HMOs. Requires HMOs to give enrollees a statement of available coverage regarding automobile accidents. ***Approved.***

S-2282—Bassano—Anabolic Steroids. Classifies anabolic steroids as a "schedule V" drug. ***Action Deferred,*** pending further information from the New Jersey Department of Health and MSNJ's Committee on Physicians' Health.

S-2361—Cardinale—Controlled Dangerous Substances. Requires the testing of applicants for motor vehicle driver's licenses for the use of controlled dangerous substances. ***No Action.***

S-2379—Thomas—Autopsy. Deletes the requirement that a consent to an autopsy must be in writing. ***Approved.***

S-2399—Russo—Drug Permits. Amends the CDS registration cycle to three years to coincide with federal CDS cycles. ***Approved.***

SJR-6—Graves—Health Care Facilities and Providers. Establishes a commission to study the feasibility of an expanded system of hospital-based nursing schools. No MSNJ representation is provided. ***Conditional Approval,*** pending amendment adding a physician to commission.

A-16—Naples—New Jersey Advance Directives for Health Care Act. This year's version of the advance directives bill (also known as the "living will"). ***Approved.***

A-239—Naples—School Bus Seat Belts. Requires all new school buses to have seat belts and mandates that students use them. ***Approved.***

A-328—Deverin—T.B. Test for Nursing Home Employees. Requires that all current and prospective employees of nursing homes be tested for tuberculosis. ***Approved.***

A-334—Deverin—Professional Liability Insurance. Allows organizations of professionals to form associations to self-insure professional liability. The entities created would be under special regulatory control of the Insurance Department, but are not to be considered insurance companies. ***Disapproved,*** because the program would not protect the public by assuring adequate financing of insurance mechanisms. Professional associations should be encouraged to form insurance carriers consistent with code.

A-353—Colburn—Certificate of Need. Exempts outpatient services with a cost of less than $2 million from the certificate of need law. Additionally, joint ventures with two or more doctors with a cost less than $4 million would be exempt from certificate of need. ***Approved.***

A-354—Colburn—Nursing Services. Provides that the costs associated with nursing services must be specifically identified in hospital budgets and rating formulas. ***Approved.***

A-377—Rooney—Motor Vehicles. Adds visual field to the driver's license test. ***Disapproved,*** extremely difficult and expensive to administer such tests.

A-410—Rooney—Preschool Vision Screening. Establishes a preschool vision screening for children three to five years of age. ***Approved.***

A-412—Rooney—Nutritionists. Licenses and regulates the practice of nutrition and creates a state board of nutrition. ***Disapproved,*** no demonstrated need to create a licensed profession in this field.

A-543—Impreveduto—Preschool Hearing Screening. Establishes a hearing screening program for preschool children. ***Approved.***

A-546—Impreveduto—Physical Modalities. Provides that physicians, podiatrists, and chiropractors may not use unlicensed aides to administer ultraviolet (B and C bands) and electromagnetic rays. ***Approved.***

A-578—Felice—Prevention of Child Abuse. Creates a 24-member commission to study the problem of child abuse and to recommend methods of prevention. ***Conditional Approval,*** pending the inclusion of a pediatrician and a psychiatrist on the commission.

A-597—Felice—Osteoporosis Study Commission. Establishes a commission (15 members) to compile and analyze data on osteoporosis, develop educational programs, and assist local health agencies in public education. ***Disapproved,*** because osteoporosis is a well-known, researched, and publicized condition, and there is no need to create a special legislative commission to conduct studies when comprehensive, scientific literature readily is available.

A-608—Felice—Food and Hydration. Requires food, water, nourishment, and hydration be provided to all patients. ***Disapproved,*** an unnecessary barrier to patient expressions—(MSNJ—December 8, 1988) "MSNJ believes the artificial administration of nutrition and hydration should be in the definition of life-sustaining treatment that can be ethically withdrawn from permanently comatose vegetative patients."

A-615—Felice—Certificate of Need. Requires the Department of Health to hold public hearings on all certificate of need applications. ***No Action.***

A-617—Felice—Medical Waste. Requires hospitals to package special medical waste in red bags marked with the international bio-hazard warning symbol and inscription. ***Disapproved,*** this legislation is adequately covered under the Comprehensive Medical Waste Management Act.

A-761—Duch—Home Health Care. Establishes a demonstration project within the Department of Human Services to provide home health care to functionally and cognitively impaired seniors or disabled persons under the Social Security Act. ***No Action.***

A-800—Bush—AIDS. Requires that AIDS and AIDS-related conditions be reported to the Department of Health. Information may be released only when patient consent or certain other situations are present. ***No Action (current law).***

A-802—Bush—Medicaid. Provides that Medicaid coverage for mammograms shall be consistent with federal policy. ***Conditional Approval,*** pending amendment that coverage also be consistent with current recommendations of the American Cancer Society.

A-803—Bush—Health Insurance. Provides that health insurers must pay for mammograms. It does not apply to routine screening. ***Conditional Approval,*** pending inclusion of routine screening and is consistent with the recommendations of the American Cancer Society.

A-828—Bush—Infant Mortality. Creates a commission on infant mortality consisting of 15 members; 4 members would be physicians. ***Approved.***

A-829—Bush—Cancer Research. Provides that a portion of the surtax on cigarettes be dedicated to the Cancer Research Fund. ***Approved.***

A-844—Bush—Sickle Cell Anemia. Requires that all infants born in the state shall be tested for sickle cell anemia and other hemoglobinopathies. ***Disapproved,*** pediatricians could better determine who needs the testing and who does not need the testing. Most babies and families would not benefit from such tests.

A-855—Villapiano—Dioxin Research. Creates a special "consortium" to conduct research on dioxin contamination. Appropriates $2,000,000. ***Disapproved,*** data is already known, research is being done, and the issue is better addressed at the federal level.

A-870—Villapiano—Emergency Medical Transportation. Requires the Department of Health to notify county health departments of all persons residing in the county that are HIV positive. The county health department is to pass the list on to each EMS transport provider. A similar notice by hospitals is to be given to EMS transport when an HIV positive patient is leaving that hospital by EMS transport. ***Disapproved,*** unenforceable and unworkable legislation. County health departments are not prepared to administer such a proposal.

A-893—Otlowski—Certificate of Need. Exempts home health agencies from the CON law. ***Approved.***

A-922—Otlowski—Drug Abuse Treatment. Makes drug abuse treatment an included item under medical service corporations. ***Approved.***

A-923—Otlowski—Drug Abuse Treatment. Same as A-922 except it applies to commercial health insurance. ***Approved.***

A-924—Otlowski—Drug Abuse Treatment. Same as A-922 except it applies to group health insurance. ***Approved.***

A-925—Otlowski—Drug Abuse Treatment. Same as **A-922** except it applies to HMOs. ***Approved.***

A-926—Otlowski—Drug Abuse Treatment. Same as **A-922** except it applies to hospital service corporations. ***Approved.***

A-966—Cohen—Blood Donation. Creates a separate criminal offense for making a blood donation while knowingly infected with a communicable disease. ***Disapproved,*** this legislation, as written, will create an overall negative impact in the blood donor programs.

A-1075—Brown—Infant Mortality. Creates an infant mortality prevention program in the Department of Health to provide obstetrical and prenatal services to women with high-risk pregnancies. Also provides postpartum followup services. Seven hospitals are designated by statute with three to be added by the commissioners. Two million dollars is appropriated. ***Approved.***

A-1107—Schuber—Compulsive Gambling. Establishes an office on compulsive gambling within the Department of Health and a 13-member advisory council. ***No Action.***

A-1483—Stuhltrager—Child Abuse Diagnostic Center. Establishes a child abuse diagnostic center in southern New Jersey. ***Approved.***

A-1556—Girgenti—Orthotists and Prosthetists. Provides for the licensing and regulation of orthotists and prosthetists through an advisory committee in the Division of Consumer Affairs. Physicians are exempted from the requirements of the act. ***Disapproved,*** there has not been a demonstrated need to license and regulate this as a profession.

A-1572—Girgenti—Medical Records. Requires hospitals and physicians to provide patients with copies of their records within 30 days of a request by the patient or their representative. ***Disapproved,*** conditions of this bill already covered by SBME regulations.

A-1630—Shusted—Medicaid: Patterning. Requires Medicaid coverage of patterning. ***Disapproved,*** because patterning has not been scientifically accepted and is both controversial and experimental.

A-1631—Shusted—Civil Immunity. Provides that volunteer officers and directors of nonprofit corporations shall be immune from certain types of suits. ***Approved.***

A-1646—Shusted—Peer Review. Adopts the provisions of the Federal Health Care Quality Improvement Act with the immunities granted. (The federal law which grants immunities also has certain required reporting.) ***No Action.***

A-1713—Smith—Lupus Registry. Establishes a lupus registry and requires physicians to report all known cases to the registry. ***Disapproved,*** the State Public Health Council has the authority to establish a registry if indicated.

A-1714—Smith—Lupus Treatment. Directs the Department of Health to establish a lupus treatment and education program and appropriates $750,000. ***Disapproved,*** already being done in physicians' offices and hospitals throughout the state.

A-1773—McEnroe—Infants: Drug Abuse. Requires the Department of Health to prepare, and physicians to distribute, a booklet concerning the dangers of using cocaine during pregnancy; appropriates $75,000. ***Disapproved,*** physicians caring for pregnant women regularly warn against the use of tobacco, alcohol, and other drugs during pregnancy. State-of-the-art literature is available from a wide range of national scientific sources. The Department of Health does not have the capacity to produce, distribute, and maintain materials of comparable quality.

A-1881—Doria—Podiatry. Permits podiatrists to certify physical disability for handicapped parking privileges. ***Approved.***

A-2035—Ogden—Emergency Medical Transport. Requires health care facilities to notify first aid, ambulance, and rescue squads that they are transporting patients with AIDS, HIV positivity, or communicable disease. ***Action Deferred,*** pending further information from MSNJ's Task Force on AIDS.

A-2139—Rocco—Fetal Remains. Requires that fetal remains be examined by a pathologist who shall report his findings to the referring physician. Remains not disposed of by interment shall be incinerated pursuant to Department of Health regulation. ***Action Deferred,*** pending further information from the New Jersey Obstetrical and Gynecological Society and New Jersey Society of Pathologists.

A-2141—Rocco—Physiological Laboratory Services. Provides that physiological laboratories performing diagnostic testing services at the request of physicians shall be permitted to bill Blue Shield directly. ***Disapproved,*** because there are no announced licensing standards in the bill. The New Jersey Insurance Department is not equipped to regulate and license a health profession. There is no recognized profession related to "physiological laboratory services."

A-2169—Rocco—Hypodermic Needles/Syringes. Increases the penalty for the illegal disposal of hypodermic needles and syringes. ***Disapproved,*** current law adequately addresses the concern of this legislation.

A-2211—Spadoro—AIDS Vaccine. Creates the AIDS vaccine and drug research and development grant program. ***Action Deferred,*** pending further information from MSNJ's Task Force on AIDS.

A-2261—Farragher—Trucking/Food/Waste. Prohibits transporters from hauling solid wastes, produce, or other items intended for human consumption in the same vehicle. ***Approved.***

A-2267—Farragher—Professional Licensing. Provides that a conviction under the Comprehensive Drug Reform Act shall automatically result in a two-year suspension of license or business permit. ***Approved.***

A-2270—Farragher—Parental Notification for Abortion. Requires physicians to notify, in writing, the parents of unemancipated minors (less than 18) 72 hours prior to an abortion. ***Action Deferred,*** pending further information from New Jersey Obstetrical and Gynecological Society.

A-2271—**Arnone—Blood Donations.** Eliminates age restrictions on blood donations. ***Approved.***

A-2340—**Franks—Motor Vehicles/Drug Tests.** Requires the Division of Motor Vehicles to establish a three-year random sample drug testing program for applicants for a driver's license. ***No Action.***

A-2404—**Baer—Sulfites.** Prohibits wholesale or retail distributors of food or food products from adding sulfites to their products. ***Action Deferred,*** pending further information from MSNJ's Council on Public Health.

A-2481—**Randall—Outpatient Drug and Alcohol Treatment.** Requires standards for outpatient adolescent drug and alcohol treatment programs. ***Conditional Approval,*** pending inclusion of two MSNJ appointed physicians to the advisory task force.

A-2485—**Randall—Smoking/Restaurants.** Requires restaurants with a seating capacity of 80 or more to have a 50 percent nonsmoking area. ***Approved.***

A-3042—**Bush—Medicare Assignment.** Requires mandatory assignment for PAAD eligible patients. ***Conditional Approval,*** pending the following amendments: presentation of PAAD cards; lower penalty violations; and recognition that physicians must bill for deductibles and copayment consistent with federal law.

[redacted]

The Reference Committee recommended that Supplemental Report #2 be filed.

HOUSE ACTION: Adopted. Supplemental Report #2 was filed, in accordance with the positions taken by the Council on Legislation.

At its meeting on May 5, 1990, the Board of Trustees changed the Council on Legislation's position on the following bill:

A-3042—Bush—Medicare Assignment. Requires mandatory assignment for PAAD eligible patients. **Conditional Approval,** pending the following amendments: (a) presentation of PAAD cards; (b) lower penalty violations; and (c) recognition that physicians must bill for deductibles and copayment consistent with federal law.

The Board of Trustees voted to change the position to **Active Opposition**; there is a successful voluntary effort to assure care to the poor. This legislation interferes with the constitutional rights of doctors and patients.

HOUSE ACTION: The House of Delegates supported the action taken by the Board of Trustees on May 5, 1990.

Resolution #2

Introduced by: **Essex County Medical Society**
Subject: **Alternative to Tort Reform**
Referred to: **Reference Committee "D"**

Whereas, we should continue to pursue traditional tort reform such as structured settlements and the statute of limitations; and

Whereas, Utah and Vermont are developing administrative action initiatives to handle professional liability to assure injured patients of reasonable damages on a compensation-type program; and

Whereas, Florida and Virginia have no-fault compensation laws covering some neurologically impaired infants; and

Whereas, other states are seeking legislation authorizing arbitration and/or the use of private contracts between providers and patients to govern professional liability; now therefore be it

Resolved, that an ad hoc committee of the Medical Society of New Jersey be established to coordinate tort reform objectives and to look into realistic alternatives to tort reform that would work in New Jersey.

The Reference Committee recommended that Resolution #2 be adopted.

HOUSE ACTION: Adopted. Resolution #2 was adopted.

Resolution #23E

Introduced by: **Essex County Medical Society**
Subject: **Oppose Physician Assistants**
Referred to: **Reference Committee "D"**

Whereas, the Medical Society of New Jersey House of Delegates has consistently rejected the licensing, registration, or use of physician assistants in New Jersey; and

Whereas, a task force of the New Jersey State Board of Medical Examiners has recommended a pilot project using physician assistants; and

Whereas, New Jersey is not a rural state and is well populated with physicians and nurses; and

Whereas, nurses perform all duties of physician assistants; and

Whereas, the licensing of physician assistants would only dilute the diligent services performed by physicians; and

Whereas, the use of physician assistants will not improve on cost, quality, or accessibility of patient care; now therefore be it

Resolved, that the Medical Society of New Jersey continue actively to oppose any licensing or utilization of physician assistants ~~and any pilot projects proposed by the State Board of Medical Examiners to legalize physician assistants in New Jersey~~; and be it further

Resolved, that the Medical Society of New Jersey oppose any pilot projects proposed by the State Board of Medical Examiners to legalize physician assistants in New Jersey.

[redacted]

The Reference Committee recommended that the resolved portion of Resolution #23E be amended (with correction in first resolved and the addition of the second resolved).

The Reference Committee recommended that Resolution #23E be adopted as amended.

HOUSE ACTION: Adopted. Resolution #23E was adopted as amended by the Reference Committee.

Resolution #24E

Introduced by: **F. Peter Rescigno, MD, Delegate,**
Essex County
Subject: **Representation on Governor's Commission on Health Care Costs**
Referred to: **Reference Committee "D"**

Whereas, Governor Florio has unveiled to the press a newly formed Commission on Health Care Costs as disclosed in the *Newark Star-Ledger* on April 19, 1990; and

Whereas, this Commission according to Governor Florio "will deal with all the health care issues: access, cost, and quality"; and

Whereas, this Commission consisting of 18 members has no member (or members) who officially represent the Medical Society of New Jersey; and

Whereas, the issues being addressed will intimately affect every physician in the state; and

Whereas, those most intensely affected should have adequate and substantial representation; and

Whereas, Governor Florio, the Commission on Health Care Costs, and the state legislature cannot solve the state's health care cost crisis on the backs of the physicians of the state of New Jersey; now therefore be it

Resolved, that the Medical Society of New Jersey aggressively seek substantial and adequate representation on Governor Florio's Commission on Health Care Costs; and be it further

Resolved, that the Medical Society of New Jersey seek representation on all governmental committees dealing with health care issues in New Jersey; and be it further

Resolved, that the Board of Trustees and the Council on Public Relations use their best efforts to make the public aware that there are no representatives of organized medicine on the Governor's Commission on Health Care Costs.

The Reference Committee recommended that Resolution #24E be adopted as amended (with the addition of a second resolved).

HOUSE ACTION: Adopted. Resolution #24E was adopted as amended by the Reference Committee, with an additional amendment (the third resolved) by the House of Delegates.

Resolution #25E

Introduced by: **F. Peter Rescigno, MD, Delegate,**
Essex County
Subject: **Information Regarding Health Care Costs**
Referred to: **Reference Committee "D"**

Whereas, the Commission on Health Care Costs, announced to the press by Governor Florio on April 19, 1990, has no official representation and participation by the Medical Society of New Jersey; and

Whereas, the Commission consists of at least one member who has publicly declared his position strongly favoring mandated fees to New Jersey physicians; and

Whereas, Governor Florio is forcefully fulfilling his campaign-stated goals with the immense power of a Democratically controlled state legislature behind him; and

Whereas, the Governor has focused the burden and financial penalty for the state automobile insurance crisis on the insurance companies, thereby establishing the implication in the public mind that they are the primary cause for the crisis; now therefore be it

Resolved, that the Medical Society of New Jersey launch a massive campaign to inform the politicians and the public that physicians will not be held accountable for the health care cost crisis and under no conditions will tolerate attempts by the state to enslave them.

HOUSE ACTION: Resolution #25E was not accepted as an emergency resolution.

Committee on Revision of Constitution and Bylaws

JAMES E. GEORGE, MD, JD, CHAIRMAN

(Reference Committee on Constitution and Bylaws)

PROPOSED AMENDMENTS TO THE BYLAWS

1. **Emeritus Membership**

The Committee on Constitution and Bylaws was requested by the House of Delegates to reconsider the issue of emeritus membership. In addition, Resolution #11 from the 1989 House of Delegates also was referred to us for review.

The Committee has concluded that any physician, regardless of age or reason, who has retired from active practice should be considered for emeritus status. Likewise, we have determined that physicians in the emeritus category should pay dues at a reduced level unless there is financial hardship. Our proposal provides for the changes discussed; i.e. beginning with the year 1991, all members who retire may be "emeritus" and those who select that category should pay 25 percent of the regular dues, unless they experience financial hardship.

Chapter I—Membership

Section 1—Composition

Current	Proposed
(d) Emeritus Members	(d) Emeritus Members
Emeritus members shall be physicians who have been members in good standing of a component society and who by reason of age or infirmity have retired from the active practice of medicine; or members of this Society who have been disabled by reason of military service. Nominations shall be submitted by the component societies, and emeritus membership shall be conferred by a majority vote of the House of Delegates. Emeritus members shall have all the privileges of membership except the right to vote and hold office, and their respective component societies shall not be assessed for such members provided they are carried as emeritus members in said component societies. Emeritus members shall not be included in the membership of a component society when computing the number of delegates to which such society is entitled. Active practice shall be determined by policy decision of the Board of Trustees or the House of Delegates.	Emeritus members shall be physicians who have been members in good standing of a component society who have retired from the active practice of medicine; or members of this Society who have been disabled by reason of military service. Nominations shall be submitted by the component societies, and emeritus membership shall be conferred by a majority vote of the House of Delegates. Emeritus members shall have all the privileges of membership except the right to vote and hold office. *Emeritus members elected after January 1991 shall pay 25 percent of the regular dues assessment unless they have been exempted for financial hardship as defined in Chapter X—Finance, Section 1—Annual Dues, paragraph (d).*

The Committee on Revision of Constitution and Bylaws recommends adoption of the Bylaw proposal.

2. **Annual Dues**

As directed, the Committee has also reviewed the Bylaws applicable to annual dues. All ramifications were reviewed. Our conclusion is that any member who experiences financial hardship because of disability or illness should be dues exempt. Likewise, any member who has suffered financial hardship for other reasons recognized by a county society should be dues exempt. We also concluded that the automatic dues exemption at age 70 is not fair to younger members. We are proposing, therefore, that members between ages 70 and 80 pay the same dues as emeritus members (25 percent). After age 80, all members would be dues exempt.

Chapter X—Finance

Section 1—Annual Dues

Current	Proposed
(d) Dues shall not be levied against any member in good standing if: 1. He shall have attained the age of seventy (70) years; or 2. They are serving in the armed forces of the United States as draftees, or as volunteers in times of military conflict; or 3. He is a member emeritus; or 4. The payment of dues would be a financial hardship by reason of physical disability or illness. A member also may be excused from payment of dues because of financial hardship for other reasons, but these reasons must be set forth annually by the secretary of the member's component society.	(d) Dues shall not be levied against any member in good standing if: The payment of dues would be a financial hardship by reason of physical disability or illness. A member also may be excused from payment of dues because of financial hardship for other reasons, but these reasons must be set forth annually by the secretary of the member's component society.
	(e) *As of January 1, 1991, the dues structure for all active members shall be:* 1. *Members under age 70 will pay full dues.* 2. *Members between ages 70 and 80 will pay 25 percent of full dues.* 3. *Members above age 80 shall be dues exempt.*

The Committee on Revision of Constitution and Bylaws recommends adoption of the Bylaw proposal.

[redacted]

In discussing the proposed amendments to the Bylaws, the Reference Committee noted that emeritus members will continue to receive all membership benefits such as: the Physicians' Health Program, insurance participation, and service on the Society's councils and committees.

Adoption of the proposed amendment also will help to assure financial stability of the Society and provide for these physicians a reduced and reasonable rate of payment. These changes will be totally prospective in nature. Physicians presently in the emeritus category automatically will be grandfathered.

In all categories where members pay dues, exemptions will always be available for those who have suffered financial hardship or distressful circumstances.

The Reference Committee recommended adoption of the proposed amendment to Chapter I—Membership, Section I—Composition, item (d) Emeritus Members.

HOUSE ACTION: Not adopted.

The Reference Committee recommended adoption of the proposed amendment to Chapter X—Finance, Section I—Annual Dues, items (d) and (e).

HOUSE ACTION: Adopted. The proposed amendment was adopted.

Resolution #22E

Introduced by: **Hudson County Medical Society**
Subject: **Term of AMA Delegates and Alternates**
Referred to: **Reference Committee on Constitution and Bylaws**

Whereas, the Bylaws of the Medical Society of New Jersey specify a maximum tenure of 12 years as AMA delegate and/or alternate delegate; and

Whereas, the success of a delegation is closely related to the visibility of its members; and

Whereas, in a body which meets only twice a year, widespread recognition can be achieved only after several years; and

Whereas, no other state medical society has a similar restriction on its AMA delegation tenure; now therefore be it

Resolved, that the restriction on tenure of the AMA delegation be removed; and be it further

Resolved, that the Bylaws be amended accordingly.

HOUSE ACTION: Resolution #22E was not accepted as an emergency resolution.

Memorial Resolution

FRANK R. BEGEN, MD, 1926-1989

Whereas, the Almighty has chosen to call from us our beloved colleague, Frank R. Begen, MD; and

Whereas, as a Fellow and Officer of this Society, Doctor Begen served its members and the people of New Jersey; and

Whereas, he demonstrated the attributes of a concerned and caring father, husband, and physician, and will be missed by all; now therefore be it

Resolved, that the Medical Society of New Jersey expresses its profound sorrow at the death of Doctor Begen and extends its sympathy to his family; and be it further

Resolved, that this Resolution be spread upon the minutes of this meeting and a copy thereof presented to his family in heartfelt sympathy.

[redacted]

Received by the House with sorrowful concurrence.

Memorial Resolution

PETER SWEETLAND, 1935-1990

Whereas, the Almighty has called from us his servant, Peter Sweetland; and

Whereas, as the president and chief operating officer of the New Jersey State Medical Underwriters, Mr. Sweetland served this Society and its insured physician membership; and

Whereas, by his example and leadership he demonstrated the attributes of a dedicated executive and manager; and

Whereas, by his strength of character and demeanor he proved an outstanding leader in the field of professional liability insurance; and

Whereas, as a husband and father he was caring and supportive to his family; now therefore be it

Resolved, that the Medical Society of New Jersey expresses its profound sorrow at the death of Peter Sweetland and extends its sympathy to his beloved family; and be it further

Resolved, that this Resolution be spread upon the minutes of this meeting and a copy, suitably prepared, be presented to his bereaved family in heartfelt sympathy.

[redacted]

Received by the House with sorrowful concurrence.

Informational Report

Senior Citizens Task Force

IAN D. SAMSON, MD, CHAIRMAN

The first meeting of the reconstructed Task Force was held on March 22, 1989. A new set of directives was given to the Task Force by the Board of Trustees. These included the provision for at least 1 senior representative of each county, approved by the county medical society. The Task Force was constituted of 18 seniors representing 12 counties; 22 representatives of the 21 County Offices on Aging; 21 county medical society executives; 20 physicians representing 18 counties, and 2 medical students, as well as 13 representatives of 12 other institutions and agencies.

A meeting then was held on April 12, 1989. Subsequent meetings were held on June 29, August 17, October 25, 1989, and January 10 and April 11, 1990. A great disappointment was the poor turnout of seniors at meetings. An exception was the October meeting, which was highlighted by keynote speakers associated with gubernatorial election. There were never more than 14 seniors present representing 12 counties. The lowest attendance was 11 seniors representing 5 counties. Counties not represented were contacted for names of senior representatives, but to no avail. This issue will be developed in the conclusion of this report.

The Task Force was directed to establish two subcommittees. The first was to investigate and report on the financing of health care delivery. The second was to attend to publicity and communication to ensure that the activities of the Task Force be disseminated as widely as possible. Unfortunately these subcommittees never functioned. However, the Task Force did generate a bulletin sent to 10,000 physicians. The missive contained suggestions to improve relations between physicians and their senior patients. The number of replies to a questionnaire in the bulletin was disappointing.

In order to address issues of conflict between physician providers, seniors, and third-party payers, each group represented on the Task Force was instructed to collate data and present their findings. In this respect the Task Force was successful. As a result of this effort a list of grievances was assembled. The majority were directed against Medicare and its carrier, Pennsylvania Blue Shield. A representative of Pennsylvania Blue Shield presented the provider's case and was subjected to intense questioning. A formal letter then was sent to HCFA summarizing recipient and physician complaints and suggesting remedial action. We have received a response from the regional office indicating their support for our comments.

Legislation relating to expenditure targets was discussed at length and a formal letter of protest was sent to our senators and congressmen. Responses were received from a number of congressmen, but by no means all. Neither of our senators responded to our letter.

A symposium on "living wills" resulted in near unanimous support for this concept by seniors and physicians alike. A letter has been drafted on behalf of members of the Task Force and will be sent to members of the New Jersey Assembly appraising them of our support for such legislation.

CONCLUSION

All the objectives of the Task Force were not met. It was, however, the consensus of the membership that the Task Force did serve a useful purpose in providing a forum for airing the problems of physicians, agencies, and seniors. It was decided that the bulletin to physicians be continued, not as an individual mailing, but as an item in *NEW JERSEY MEDICINE.*

Concern was expressed about the small representation on the Task Force by seniors. It is felt that this deficiency needs correction if the Task Force is to have a meaningful impact on our senior community. Therefore, we will enlist the support of the Offices on Aging to supply us with senior representatives. Up to four seniors per county will be asked to sit on the Task Force. They should be responsible members of local senior clubs and organizations.

PLANNING FOR 1990/1991

In order to assess the impact of the Task Force on seniors' constituencies, we would require feedback from their representatives in the form of bulletins and minutes. In this manner the Committee on Senior Citizens will be able to judge the effectiveness and significance of the Task Force.

The Task Force will meet four times a year. A featured speaker, address, or debate on items of mutual interest will be held on each occasion. We will continue to monitor legislation, public health matters, and concerns relating to senior citizens and act responsively.

Informational Report

Task Force on the Shortage of Nurses and Technical Personnel

JOHN S. MADARA, MD, CHAIRMAN

The Task Force on the Shortage of Nurses and Technical Personnel was formed in response to Substitute Resolution #20 (1988)—Solving the Nursing Shortage. Representatives of various branches of nursing—including the University of Medicine and Dentistry of New Jersey, the New Jersey State Nurses Association, the Licensed Practical Nurse Association of New Jersey, Inc., the New Jersey Hospital Association, the New Jersey State Department of Health, and nonaligned nurses—attend meetings of the Task Force, and representatives from the allied health field recently were added as consultants.

Three major areas of need were identified to address the shortage of nursing and technical personnel: funding, retention, and recruitment. An interim report, listing the accomplishments of the Task Force was made to the Board of Trustees on September 17, 1989, and a recommendation that the Society adopt the following listed policies was approved by the Board:

1. **Registered Care Technician (RCT).** The proposal of the AMA should not be implemented in New Jersey at this time.
2. **Salaries.** Nurses' salaries should be competitive with contiguous states.
3. **Physician-Nurse Collaboration.** Communication/collaboration between physicians and nurses should be strongly encouraged.
4. **Non-Nursing Functions.** Nurses should be relieved of non-nursing functions, and guidelines implemented to reduce time spent in excessive documentation requirements.
5. **Acute Care Nursing Assistant Program.** Funding should be sought for implementation of the ACNA program proposed by UMDNJ-Department of Nursing Education and Services, endorsed by the Medical Society of New Jersey (Board of Trustees, October 16, 1988), and the New Jersey Hospital Association as a method to relieve the task load of professional nurses in acute care institutions.
6. **NJHA Nursing and Allied Health Resource Center.** The Resource Center should be supported as an information clearinghouse and referral source for individuals interested in nursing and allied professions.
7. **Scholarships.** Health career scholarships and tuition forgiveness programs should be encouraged for individuals interested in nursing and allied health careers.
8. **Support Personnel.** Sufficient support personnel must be provided so that nurses can focus on providing, supervising, and coordinating quality nursing care. Licensed practical nurses (LPNs) should be utilized at all levels of hospital care; they should be permitted to perform such additional patient care procedures as defined by the expanded scope of practice permitted by the State Board of Nursing.
9. **Graduate Nurses Who Fail Board Examinations.** In order to facilitate retention, a means should be found to extend work permits, with limitations, to allow graduate nurses who fail their board examinations to function in the graduate nurse capacity, until they retake the examination.
10. **Work Environment.** Hospitals should be encouraged to provide child care for women returning to the workplace, and extra pay for the more difficult or less desirable shifts.
11. **Allied Health Personnel.** Monies should be made available to provide hospitals with sufficient reimbursement funds to recruit and retain allied health personnel. Educational opportunities, with flexible and innovative programs, scholarship programs, and long-term agreements should be offered. Setting higher standards to enter the curriculum, providing counseling, and offering flexibility according to student needs also should be encouraged. Career pathways should be bolstered.
12. **Restructuring of Health Care Givers in Hospital Environment.** Restructuring should be established, with nursing professionals having greater autonomy in an administrative and

clinical sense, and cooperating with physicians in establishing parameters to supervise the delivery of patient care rendered by LPNs and certified nursing aides.

13. **Foreign Nurses.** Recruitment of nurses from other countries should be considered.

14. **Recruitment at the High School Level.** Publicity campaigns should be conducted by appropriate professional organizations in cooperation with technological societies, county medical societies, and specialty groups to stimulate interest in allied health careers at the high school level.

15. **Hospital-Based Educational Programs.** Hospitals should be encouraged to open schools of technology in multiple fields. Funds should be sought to encourage hospitals in underprivileged areas to offer high school graduates opportunities to enter allied health professions for a reasonable (or minimal) tuition, and in their local communities. Tuition waivers to further education for those volunteering to work a certain number of years at a hospital should be encouraged.

16. **Courses in Interpersonal Relationships and Stress Management.** Courses should be encouraged in interpersonal relationships and stress management through the offices of appropriate professional organizations.

Former Acting Commissioner of Health, Leah Z. Ziskin, MD, MS, evinced a high level of interest and enthusiasm for nursing issues. Her letter to the Society in response to the recommendations of the Task Force reflected the views of the Department of Health and the Department's Nursing Advisory Committee.

Additional topics considered by the Task Force include:

1. **Nursing Models Incentive Reimbursement Program.** The recommendation of the Task Force that the Society support the Nursing Models Incentive Reimbursement Program was approved by the Board. The Nursing Models Incentive Reimbursement Program addresses the nursing shortage and its underlying causes. The purpose of the program is to provide acute care hospitals in New Jersey with an opportunity to develop innovative and cost-effective models of nursing practice and nursing environments that will foster high-quality patient care. Seventy-one hospitals filed applications to participate in the program. Awards totalling $7.1 million were made by the Department of Health to 23 acute care hospitals in New Jersey. The Department of Health intends to seek approval of the Hospital Rate-Setting Commission for awards for the second year and it is expected that requests for proposals will be sent to New Jersey hospitals in June.

2. **Physician/Nurse Policymaking Committees.** The Task Force recommended that the Medical Society of New Jersey encourage hospitals to have a permanent voting or nonvoting position on their medical staff executive committee; and that hospitals also be encouraged to have a member of the medical staff executive committee as a permanent voting or nonvoting member of the equivalent policymaking nursing committee. The recommendation was approved by the Board of Trustees.

3. **Concerns of Licensed Practical Nurse Association of New Jersey, Inc.** The concept of restricting the entry levels into nursing to associate and baccalaureate programs, as endorsed by organized nursing, is of great concern to LPNs. The Task Force considered the request of the LPN associate to support (a) the retention of the "Licensed Practical Nurse" title; and (b) the present four entry levels of nursing. The Board approved the recommendation that the Society endorse the educational mobility concept in nursing, i.e. from nursing assistant through the various levels of nursing education.

4. **Continuation of the Work of the Task Force.** It was agreed by the members that the work of the Task Force has not been completed. A number of items were suggested for possible consideration at future meetings.

A. The main focus of the group has been on nursing; greater emphasis will be placed on the shortage of allied health personnel.

B. While communication between physicians and nurses is a problem that has been considered, the Task Force believes it is still an area relevant to the shortage of nurses that needs to be resolved and, therefore, will continue to explore the issue.

C. The establishment of nursing scholarships by the Medical Society of New Jersey or by component societies has been touched on briefly and will be pursued at a future meeting.

New Business

Introduced by: **Board of Trustees**
Subject: **Honorary Membership—George F. Willis**

Whereas, George F. Willis has served for many years as executive director of the Bergen County Medical Society; and

Whereas, he has been totally dedicated and devoted to the physicians of Bergen County and the state of New Jersey; and

Whereas, he has shown committed service to MSNJ; now therefore be it

Resolved, that George F. Willis be elected an honorary member of the Medical Society of New Jersey.

[redacted]

HOUSE ACTION: Adopted.

Introduced by: **Frank Y. Watson, MD, Fellow**
Subject: **AMA Executive Vice-President**

Whereas, the Executive Vice-President of the AMA, James H. Sammons, MD, announced in December 1989 his intention to retire; and

Whereas, Doctor Sammons announced his retirement on February 9, 1990; and

Whereas, a sufficient period of time has elapsed for a thorough search for suitable candidates to fill this position; and

Whereas, suitable outstanding candidates have applied for the position; now therefore be it

Resolved, that the AMA Board of Trustees Search Committee cease its search without further delay, evaluate the available candidates, and submit its recommendation to the AMA Board of Trustees; and be it further

Resolved, that the AMA Board of Trustees fill the position of executive vice-president as soon as possible and no later than the 1990 AMA Annual Meeting in June.

[redacted]

HOUSE ACTION: Adopted.

Introduced by: **Suzanne A. Widrow, MD, Delegate, Morris County**
Judith C. Gellrick, MD, Delegate, Bergen County
Subject: **Gender Exploitation in the Workplace**

Whereas, women make up about one third of the physicians in the state of New Jersey in private practice and in academia; and

Whereas, the number of women in medicine in New Jersey continues to increase as more women graduate from medical schools, and residency and fellowship programs; and

Whereas, it has been recognized that the professional rights of all physicians should be protected and equal; and

Whereas, physicians who have equal training and credentials should have access to equal pay, equal advancement, and equal promotion paths in academia and in private practice; now therefore be it

Resolved, that the Medical Society of New Jersey is opposed to exploitation and discrimination in the workplace based on gender; and be it further

Resolved, that this resolution be forwarded to the AMA for action.

[redacted]

HOUSE ACTION: Adopted as amended by the House of Delegates.

Offices Filled By Election
1990 Annual Meeting

Office	Term	Nominee and County
Officer		
President-Elect	1 year	Joseph A. Riggs, MD, Camden
1st Vice-President	1 year	William E. Ryan, MD, Mercer
2nd Vice-President	1 year	Joseph N. Micale, MD, Hudson
Trustees		
1st District	3 years	Anthony P. Caggiano, Jr, MD, Essex
	3 years	R. Gregory Sachs, MD, Union
2nd District	3 years	Philip J. Jasper, MD, Passaic
	3 years	Carl Restivo, Jr, MD, Hudson
3rd District	3 years	Michael M. Heeg, MD, Mercer
	3 years	Leticia V. DeCastro, MD, Middlesex
4th District	3 years	Angelo S. Agro, MD, Camden
Judicial Councilors		
1st District	3 years	Anita Falla, MD, Essex
4th District	3 years	George T. Hare, MD, Camden
AMA Delegates		
	2 years	Karl T. Franzoni, MD, Mercer
	2 years	Frederick W. Durham, MD, Camden
	2 years	Ralph J. Fioretti, MD, Bergen
	2 years	Palma E. Formica, MD, Middlesex
	2 years	John S. Madara, MD, Salem
	2 years	Henry J. Mineur, MD, Union
	2 years	Edward A. Schauer, MD, Monmouth
AMA Alternate Delegates		
	1 year*	A. Ralph Kristeller, MD, Union
	2 years	Joel S. Cherashore, MD, Essex
	2 years	Paul J. Hirsch, MD, Somerset
	2 years	A. Ralph Kristeller, MD, Union
	2 years	Joseph N. Micale, MD, Hudson
	2 years	Irving P. Ratner, MD, Burlington
	2 years	Carl Restivo, Jr, MD, Hudson
Administrative Councils		
Legislation		
1st District	2 years	George J. Hill, MD, Essex
2nd District	2 years	Donald J. Cinotti, MD, Hudson
3rd District	2 years	Gabriel F. Sciallis, MD, Mercer
4th District	2 years	William V. Harrer, MD, Camden
Medical Services		
1st District	2 years	Robert H. Stackpole, MD, Union
2nd District	2 years	Frederic E. Wien, MD, Passaic
3rd District	2 years	Ismail Kazem, MD, Mercer
4th District	2 years	Joseph W. Sokolowski, Jr, MD, Camden

*Vacancy created by resignation of Bernard Robins, MD.

Office	Term	Nominee and County
Mental Health		
1st District	2 years	Rita R. Newman, MD, Essex
2nd District	2 years	Eva Muller, MD, Passaic
4th District	2 years	Kenneth J. Rubin, MD, Monmouth
5th District	2 years	Terry A. Johnston, MD, Atlantic
Public Health		
1st District	2 years	Richard R. Lorber, MD, Union
2nd District	2 years	John P. Mudry, MD, Bergen
3rd District	2 years	Lawrence D. Frenkel, MD, Middlesex
4th District	2 years	Mary F. Campagnolo, MD, Burlington
Public Relations		
1st District	2 years	Philip A. Rispoli, MD, Essex
3rd District	2 years	Leticia V. DeCastro, MD, Middlesex
4th District	2 years	Aram M. Sarajian, MD, Ocean
6th Member	2 years	Harry H. Brunt, Jr, MD, Monmouth
Standing Committees		
Annual Meeting	2 years	John P. Mudry, MD, Bergen
	2 years	Frank R. Romano, Sr, MD, Union
Finance and Budget	2 years	Julie M. Fortunato, MD, Bergen
	2 years	Frank L. Redo, MD, Salem
Medical Education	2 years	Paul C. Royce, MD, Monmouth
	2 years	Anthony P. DeSpirito, MD, Monmouth
Membership Services	2 years	Donald J. Cinotti, MD, Hudson
	2 years	Robert L. Maggs, MD, Monmouth
Publication	2 years	William V. Harrer, MD, Camden
	2 years	Morris Soled, MD, Hudson

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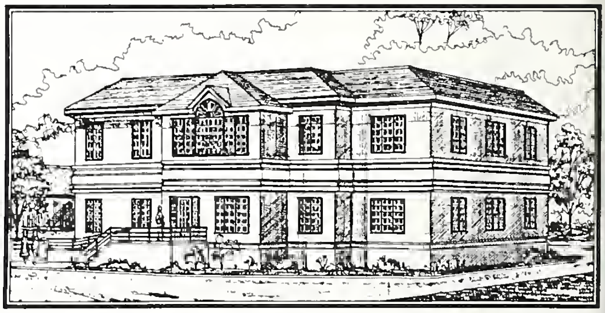

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NEWSWATCH

MALPRACTICE SURCHARGE/SEPTEMBER HEARING

The regulation adopted by former Insurance Commissioner Kenneth Merin is being legally contested by the Medical Society of New Jersey. The proposal places a surcharge of up to 5 percent on all malpractice policies for at least seven years beginning with 1990. MSNJ is represented by Judge Herbert Stern who will argue the case before the appellate division in Trenton on September 17, 1990. It is expected that the court will render a decision within 30 to 60 days of trial.

PHYSICIAN ASSISTANTS HEARING: AUGUST 15, 1990

The State Board of Medical Examiners held a hearing on August 15, 1990, on its regulatory proposal to authorize physician assistants. State Senator John Bennett (Mon) advised the Board that its proposal violates state law, exceeds regulatory authority, and usurps legislative prerogative. Judge Herbert Stern represented MSNJ and concurred with Senator Bennett's opinion. In addition, Judge Stern stated the proposal was unnecessarily vague and inherently defective. Representatives of the State Department of Corrections and the State Department of Human Services testified in favor of the proposal but offered no factual evidence regarding their methods to recruit physicians for institutional purposes. A thorough search of advertising in NEW JERSEY MEDICINE for the last eight years indicated only one advertisement was placed, asking interested psychiatrists to contact a county corrections department; neither a position description nor salary and benefit schedule were included.

MSNJ OPPOSES NO-FAULT FEE SCHEDULE

On August 15, 1990, MSNJ submitted comments to the insurance department in opposition to the proposed automobile insurance PIP fee schedule. MSNJ maintains that the automobile reform act known as FAIRA is unconstitutional; that regardless of FAIRA, the fee schedule is unconstitutional; that if FAIRA and the fee schedule are constitutional, the fee schedule does not comply with the statutory standard established in FAIRA. Trial for the MSNJ lawsuit challenging FAIRA is expected in late September.

PROFESSIONAL LIABILITY

MD ENTITLED TO PARTIAL IMMUNITY

A physician was entitled to partial immunity under the Good Samaritan statute in an action for the death of an emergency department patient, a Michigan appellate court ruled. On June 22, 1985, the patient was admitted to the emergency department at a hospital after being injured in an automobile accident. The emergency department physician examined the patient and determined that the situation required the services of a surgeon. The on-call surgeon was unavailable because he was attending a wedding. The emergency physician then asked the unit secretary to contact another physician.

The second physician agreed to come to the hospital after he was told that the on-call surgeon was unavailable. When he arrived at the hospital, the patient was being taken from the emergency department to have a CAT scan. He examined her and made the decision to operate while she was in the CAT scan room. The patient was taken to the operating room but was pronounced dead about 40 minutes later.

Her estate filed a malpractice action against the emergency department physician and the treating physician. A trial court granted summary judgment in favor of the treating physician on the grounds that he was immune under the Good Samaritan statute.

Affirming the decision, the court said that the Good Samaritan statute clearly applied to the physician's activities in the hospital. The estate argued that the statute should be applied in the "biblical" or "classic" situation where the physician or other person rendered care outside his job description or training. The court cited two other cases it had decided earlier and said that the physician had no duty to respond to the emergency situation.

The trial court properly denied the estate's request to amend the complaint to allege gross negligence and wilful and wanton misconduct. (Reprinted with permission from *The Citation,* American Medical Association, Vol. 61, May 1, 1990)

RIGHT TO REFUSE CESAREAN SECTION

A terminally ill pregnant patient had the right to determine the course of medical treatment, including refusing a cesarean section that her physicians believed was necessary to save the life of the fetus, the highest court of the District of Columbia ruled. The 27-year-old patient had suffered from cancer since the age of 13. She underwent major surgery several times, together with multiple radiation treatments and chemotherapy. She had married during a period of remission and soon became pregnant. On June 9, 1987, when she was 25 weeks' pregnant, she went to the hospital for a scheduled visit. Because she was experiencing pain in her back and shortness of breath, an x-ray was taken. This revealed an apparently inoperable tumor that nearly filled her right lung. She was admitted to the hospital and she said that she really wanted to have her baby. Her condition worsened, and her physicians informed her that her illness was terminal. She agreed to treatment designed to extend her life until at least her 28th week of pregnancy because the potential outcome for the fetus was much better at 28 weeks.

The hospital filed an action for a declaratory judgment and the trial court convened a hearing at the hospital. After hearing testimony, the court found that the 26-1/2 weeks' pregnant patient would probably die within the next 24 to 48 hours and that the fetus was viable and had a 50 to 60 percent chance to survive if a cesarean section was performed as soon as possible. The court said that there was some testimony that the operation may hasten the death of the patient and the delay would greatly increase the risk to the fetus. The court noted that it did not know what the patient's present views were because of sedation, but it ordered that a cesarean section be performed to deliver the child.

The decision was relayed to the patient, who had regained consciousness. She agreed to the procedure at first, but when a physician went back to confirm her consent she clearly indicated that she did not want the operation done. The court again ordered that a cesarean section be performed.

The patient's attorney obtained an immediate telephone appeal to the highest court of the District of Columbia, but the three-judge panel denied the motion for a stay of the operation. The operation took place but the baby lived only a few hours, and the patient died of her cancer two days later.

Following publication of the panel's decision, the AMA, ACOG, and the Medical Society of the District of Columbia filed an amicus brief arguing that the court should not have interjected itself into the medical decision-making process between the patient and her physicians. The medical groups also reminded the court that the expressed wishes of a patient as to treatment form an important part of a physician's judgment as to the appropriate course of medical care. On March 17, 1988, the court granted rehearing en banc and vacated its earlier opinion and judgment. The case was argued en banc September 22, 1988, and decided April 26, 1990.

Recognizing that the situation may arise again because the hospital operated a high-risk pregnancy clinic, the highest court of the District of Columbia said that the trial court should have determined whether the patient was competent to make her own medical decisions. The court said that it was an error for the court to balance the rights of the patient against the interests of the state until it had determined that the patient had refused the procedure. If the patient were unable to make her own judgment, the court must make a substituted judgment to determine her subjective desires.

The court said that if the patient was competent, her informed decision regarding the course of her medical treatment would control in virtually all cases. The court anticipated that cases in which the patient's wishes must yield to a conflicting state interest will be extremely rare and truly exceptional.

The court vacated the trial court's orders and remanded the case for proceedings that may be appropriate. The patient's estate had filed a civil action against the hospital based on the events leading to the trial court's order. The higher court stated that the trial court's order allowing the hospital to perform the cesarean section was presumptively valid from the date it was entered until the day of the higher court's ruling. (Reprinted with permission from *The Citation,* American Medical Association, Vol. 61, June 1, 1990)

MSNJ NEWSLETTER

QUALITY OF LIFE AND HEALTH SURVEY

The Citizens' Committee on Biomedical Ethics is proud to announce its participation in a two-state (Colorado and New Jersey) project funded by PEW Charitable Trust. The project will measure citizens' attitudes about different aspects of quality of life. Quality of life is defined as having three main areas: physical suffering and other symptoms; emotions and outlook on life; and daily activities. The populations measured include persons with chronic illness, disability, and recently diagnosed lung cancer patients, and the medically underserved.

The study will reveal if health care services are worthwhile to those who receive them; this information could be incorporated in a process for developing practice guidelines or in the process used to set a list of beneficial services. This research will lead to better public decisions in personal and societal health care issues. In addition, the information obtained will be used to develop a brief, generic, self-administered questionnaire for use in a wide variety of patient outcome studies.

The Committee is soliciting facilities, organizations, and associations to help assess patient populations and, where appropriate, to assist in administering a questionnaire developed over the past 18 months. Please contact Theresa H. Hauber, MPH, Director, The Citizens' Committee on Biomedical Ethics, Inc., Oakes Outreach Center, 120 Morris Avenue, Summit, NJ 07901-3948; 201/277-3858.

SPORTS '90

On October 3, 1990, the Medical Society of New Jersey Committee on Medical Aspects of Sports and the Academy of Medicine of New Jersey are sponsoring a symposium entitled, "Sports '90." The day-long meeting is open to physicians, nurses, coaches, school administrators, and trainers. The conference, under the direction of Vincent J. McInerney, MD, begins at 8:15 a.m. For further information on registration, call the Medical Society of New Jersey headquarters at 609/896-1766.

NEUROPSYCHIATRIC PROBLEMS IN THE ELDERLY

UMDNJ-School of Osteopathic Medicine, Center for Aging, and the New Jersey Geriatric Society are cosponsoring a one-day conference for primary care health providers on October 24, 1990, at the Harbor League Club in Camden. The conference is entitled "Managing Neuropsychiatric Problems in the Elderly." In addition to lectures, there will be four workshops. For further information, contact Marcella Freed, 609/346-7083.

RELMAN RETIRES AS EDITOR

The Massachusetts Medical Society (MMS) announced the retirement of Arnold S. Relman, MD, as editor-in-chief of *The New England Journal of Medicine* in June 1991. Dr. Relman was appointed editor in 1977 and became editor-in-chief in 1988. "After a long term of service at the *Journal,* I feel it is time to devote myself more to writing and teaching, and to participate more fully in public policy debates on American health care," said Dr. Relman.

AIDS WALKATHON

On Sunday, October 14, hundreds of people will walk through Newark's Branch Brook Park to benefit New Jersey women and children living with AIDS. This event is sponsored by Champions-UMDNJ, the

University's nonprofit fundraising and advocacy group. Through gifts from corporate donors as well as sponsors for individual walkers, Champions hopes to raise as much as $200,000 to establish an endowment fund for University-wide AIDS-related projects. The first grant from the fund will be awarded to Dr. Patricia Kloser, medical director of AIDS services at UMDNJ-University Hospital, to support the specialized clinic for women with AIDS.

STATE TO RETURN MILLIONS

New Jersey is near settlement with the U.S. Department of Labor to return $100 million, with interest, that the Kean administration transferred from New Jersey's Unemployment Insurance Trust Fund last year to a newly created Uncompensated Care Offset Account. The Offset Account was established to help cover indigent health care costs in the 1989-1990 state budget. The transfer was challenged in federal court last July by the AFL/CIO. The settlement would remove the threat of federal decertification of the unemployment insurance program that would result in a loss of $37 million in administrative funding and more than $1 billion in tax credits claimed by New Jersey employers. Under the agreement, the state does not recognize an illegal transfer of funds and agrees to return the money in 1992 or 1993.

MEDICARE PART B LATE CLAIMS

Blue Shield of Pennsylvania, the Medicare Part B carrier for New Jersey, announced that physicians and suppliers must file assigned Medicare B claims within one year of the service date, or face a 10 percent payment reduction. The penalty will be effective for services performed on or after September 1, 1990. The payment reduction is a result of the Omnibus Budget Reconciliation Act of 1989, that requires all physicians and suppliers that accept assignment to file claims on behalf of Medicare beneficiaries, and also for services performed after September 1, 1990.

PEDIATRIC AIDS UNIT IN NEWARK

Children's Hospital of New Jersey and UMDNJ were awarded a $1.3 million federal grant by the U.S. Department of Health and Human Services to operate a pediatric AIDS resource center. The grant was announced by U.S. Department of Human Services Secretary Louis Sullivan and Senator Frank Lautenberg. Newark has the third largest pediatric AIDS population in the nation and is fifth in the number of adult AIDS cases.

HEALTH CARE FOR THE UNINSURED

The New Jersey Department of Health has determined that some hospitals continued to bill a patient even after a valid charity care approval. According to N.J.A.C. 8:31B-4.39(a)10, a hospital cannot receive any type of uncompensated care reimbursement if a charity care patient is inappropriately billed. In cases where this situation is identified and verified with the hospital, the appropriate place to report these amounts is as courtesy adjustments. This treatment will be verified on audit.

HOSPITAL CEO SALARIES

Hospital CEO salaries and compensation were under scrutiny by the *Newark Star-Ledger*, apparently due to concerns about health care costs. The recent newspaper article identified some New Jersey hospital CEOs, their salaries, and the hospital's gain or loss for the year reported. Their report claimed a hospital's size and the CEO's salary are not related.

LICENSURE BOARD

HHS Inspector General Richard Kusserow says that the state medical licensing boards are overworked and understaffed, often with less than five members per board. The inspector general indicates that the volumes of red tape, the lack of sharing information, and poor legal proof standards limit the boards' decision-making abilities. He believes that HHS should develop uniform performance indicators, distribute board performance data, and create a national board.

TOBACCO: TRADE OR HEALTH

According to the General Accounting Office (GAO), the U.S. exported $4.3 billion of tobacco in 1989. HHS Assistant Secretary for Health James Mason, an advocate of banning the export of U.S. tobacco, recently had to cancel an appearance with U.S. trade representative officials, proponents of tobacco exporting. HHS Secretary Sullivan, who has attacked the use of tobacco in the home as well as the exporting of tobacco, says that he is not ready to confront the exporting of tobacco head-to-head, yet. The GAO indicated that Congress has to decide whether health policy or trade policy will prevail.

1990 TRENDS IN HEALTH CARE

According to an article in *Hospital Management Review,* the following trends for the 1990s are expected: health care costs will increase 9 to 10 percent in 1990; hospital specific costs will increase 11 to 13 percent, while insurance premiums increase 17 to 25 percent; the aging population will create an inpatient surge and the increase in Medicare patients and governmental underfunding will strain hospital revenues; ambulatory services will increase by 7 to 15 percent per year through 1993; the Harvard RVS scale will be implemented to set prices on physician services; the nursing shortages will subside but it will cost hospitals 7 to 20 percent in salary increases; utilization review groups will become more aggressive with denial rates of 4 to 5 percent; 50 percent of the population will be enrolled in managed care plans; and emergency room overcrowding will limit access to care.

ROOM/BOARD RATES

According to Department of Labor statistics, increases in nursing salaries, uncompensated care, and the demand for new advanced equipment are forcing hospitals to continue to increase room and board rates. With a 1.1 percent increase in March and a .7 percent increase in April, the Department of Labor indicates that hospital room and board rates are rising faster than physician fees.

NEW DRG CATEGORIES

Next year, five diagnosis related group (DRG) categories will be added to the current Medicare DRG listing: bone marrow treatment, HIV treatment, liver transplants, multiple trauma, and tracheotomies.

CAP DME PAYMENTS

According to an ongoing General Accounting Office (GAO) study, Medicare payments vary widely across states for the same durable medical equipment services. The variances are not supportable by differences in supplier costs and are not viewed as reasonable. The GAO study results prompted backing of the Administration's 1991 budget proposal to cap Medicare DME payments at national median levels.

EMPTY HOSPITAL BEDS

According to a recent study conducted at Johns Hopkins University, approximately 194,000 hospital beds or 21 percent of available staffed beds are vacant. The study estimates the annual cost of maintaining the unoccupied beds at $3.1 billion. The facilities experiencing the highest proportion of excess beds tended to be small, rural hospitals under 25 beds. The authors noted that elimination of these unoccupied beds would not provide efficiencies since the capital investment already has been made.

EMERGENCY ROOM CRISIS

Representative Charles Rangel (D-NY) is spearheading a Congressional caucus on the crises in U.S. emergency rooms. He has requested colleagues to study and visit emergency rooms and he has requested a General Accounting Office review on emergency room quality. Factors including uninsured patients, AIDS, drug abuse, staff shortages, and violence have created overburdening and may require legislative action.

HMO ENROLLMENT GROWS

Enrollment in traditional HMO plans grew 3.8 percent in 1989 according to a report released by InterStudy, a Minnesota-based managed care research firm. In January 1990, 33.1 million Americans were enrolled in

HMO plans as compared to 31.9 million in January 1989. The number of HMOs has declined with 15 of the nation's 590 HMOs in July 1989 no longer in existence in January 1990. California leads the nation in HMO enrollment rate with almost 30 percent of the state's population enrolled in an HMO.

AMBULATORY SURGERY UNNECESSARY

According to a study of data from ten states regarding the quality and necessity of ambulatory cataract surgery, endoscopy, and colonoscopy procedures, the office of the inspector general (IG) concludes that Medicare still pays for unnecessary ambulatory surgical procedures. In 1988, an estimated 6,400 cataract procedures and 23,600 endoscopies were deemed unnecessary. In evaluating procedure quality during 1988, an estimated 7,000 cases of poor quality care and 55,000 cases of questionable quality care were noted. IG recommendations suggest intense scrutiny and second opinion requirements for cataract surgery, as well as preoperative review for endoscopies as a means of reducing unnecessary procedures.

HEALTH CARE SURVEY

A survey of over 1,700 hospital administrators and chief executive officers found that 71 percent of those responding believe health care in individual cases should be limited because of cost. Over 50 percent of the respondents believe that care for the elderly absorbs a disproportionate amount of available resources and that defensive medicine is not an efficient use of available funds. Approximately 50 percent believe that hospital closings in the next five years will total 330 to 550 of the country's 5,500 acute-care hospitals, including 43 percent who believe their own facilities may close. Other survey findings include:

- Approximately 50 percent of hospital administrators and CEOs believe physicians are only moderately respected in the community, and that physicians do not spend enough time with individual patients, are overly concerned with making money, and do not satisfactorily explain problems and treatments to patients.
- More than half the respondents indicated they would leave the health care field if they could receive equal compensation.
- Twenty-five percent of those responding indicated that their facilities had average occupancy rates less than 40 percent during the past year.
- Emergency room service was ranked as the most unprofitable service by 58 percent and was followed by obstetrics at 46 percent. However, hospital administrators and CEOs indicated that obstetrics (22 percent) would be the service they would cut back, with clinics (16 percent), psychiatry (12 percent), ambulance services (12 percent), kidney dialysis (11 percent) and neighborhood health centers (10 percent) suggested for cutbacks before emergency room service.
- The New England area received 23 percent of votes as the region of the country with the best hospitals, while the east south central region (Alabama, Kentucky, Tennessee, and Mississippi) received 35 percent of the votes as the area having the worst hospitals.

Respondents believe more health care services will be provided outside the hospital by the year 2000 and that there will be fewer, but larger, regionalized hospitals providing short- and long-term care, hospital administrators and CEOs believe that employers will be mandated to provide a specific level of health insurance by the year 2000, and that physicians and patients will have less freedom of choice.

FINI

"Carrying your cares to bed is like sleeping with a pack on your back."

EDITOR'S DESK

Ms Gloria Steinem recently was interviewed on television on the occasion of the republication of the magazine, *Ms,* after a hiatus of many months. She said the original magazine had plenty of readers but had difficulty in obtaining advertisers because of editorial policy. The new format will exclude all advertising, and the costs of publication will be sustained by subscriptions of $40 for six issues, in order to obtain editorial freedom. According to Steinem, true editorial control means that her publisher would not be expected to even see, let alone direct, the input to the magazine.

Earlier this year, George D. Lundberg, MD, editor-in-chief of *JAMA,* published his thoughts on restoring the proper balance between commercialism and professionalism in medicine. He felt that the scale had tipped too far toward medicine as a business and asked for a return to loftier goals. He was not a lone voice crying out in the wilderness; many others, including those mentioned in his bibliography, have written in the same vein in recent years, some less delicately than Dr. Lundberg. Nevertheless, the Illinois State Medical Society introduced a resolution at the Annual Meeting of the AMA House of Delegates this past June that would require Dr. Lundberg's editorials to be scrutinized by an overseeing committee before publication, in effect acting as a censor. The resolution was defeated soundly.

We also are familiar with the policies of many other magazines, periodicals, and newspapers, as expressed in their editorials. Given a subject with political overtones, one can almost always predict the critique to be offered by *The New York Times,* the *Washington Post,* the *National Review,* and others. It is unnecessary to characterize remarks as conservative, liberal, right-wing, or left-wing; battlelines have been drawn and the readers know what to expect.

What are the responsibilities of the editor? How much fealty is due the publisher as compared to the reader? Is the editor restricted to the technical details of publishing a periodical? Et cetera, et cetera.

We have no quarrel with the leanings of reputable newspapers. Although their editorials tend to be written in line with the sentiments of the editorial staff and the publisher, all good newspapers will sound the alarm on instances of malfeasance and corruption in high places, irrespective of party loyalty. We have witnessed this type of responsible journalism many times (all too sadly) in recent years. As long as these pro bono activities continue, we should welcome a "free press," even though sometimes it is our ox that is gored.

We certainly wish Steinem luck with her new endeavor. We are more inclined to congratulate her on her magnificent salesmanship (salespersonship?) to have a publisher underwrite the costs of the venture without any say-so at all. Perhaps the publisher is Gloria's alter-ego or, at least, a J. P. Morgan descendant. The concept seems, at least from the sketchy outline provided, to be marginal at best.

The disagreement between the Illinois State Medical Society and Dr. George Lundberg touches much closer to home and this writer can place himself in Dr. Lundberg's shoes quite easily. Despite the volume differences in many areas between *JAMA* and *NEW JERSEY MEDICINE,* our respective publishers are the AMA and MSNJ. Our readership, with additions, consists of physicians, most belonging to these organizations. Neither George nor Howard believes an editor should confine himself to encouraging the submission of manuscripts, proofreading, checking layouts, making copy readable, and other similar necessities of publishing. Some editorials will summarize or pinpoint articles in the journals. Others can act as spurs—for thinking, reconsidering, or acting—sometimes in an effort to redress inequities in today's unfair world. This should evoke plaudits from the readers, even when the editor's and the reader's perspectives and approaches may differ. (Arnold Relman, MD, apparently considers this aspect of editing as his mandate. He changed from "editor" to "editor-in-chief" to allow more time with policy and philosophy and less with the necessary, more mundane efforts of publishing a journal. And, he recently has announced that he will leave *The New England Journal of Medicine* in June 1991 to devote more time to writing, reading, and lecturing on topics dear to his heart.)

How closely should an editor of a scientific journal follow the policies of the publisher, the sponsoring society(ies)? We cannot speak for Dr. Lundberg, but this editor will parrot no organization and no individual, although we may quote some at times. Rather, we will express personal opinions that have been tempered by many years of participation in organized medicine at all levels and therefore, more often than not, may represent the views of MSNJ and most of its membership. If so, it will be because of conviction and not caprice, because of logic and not blind loyalty, and because of concern and not command.

> *"An editor is one who separates the wheat from the chaff and prints the chaff."*
>
> Adlai Stevenson,
> *The Stevenson Wit* (1966)

BOOK REVIEWS

CRANIOSPINAL MAGNETIC RESONANCE IMAGING

Stephen Pomeranz, MD (ed). Philadelphia, PA, W.B. Saunders Company, 1989. This text is a concise, organized discussion of central nervous system magnetic resonance imaging (MRI). The contributors admirably perform the task of explaining the indepth physics of MRI as well as reviewing MRI findings of neurologic diseases. The monograph begins with a clear, thorough review of the physical basis of MRI scanning. Special attention is given to flow and gradient-echo (GRASS/FLASH) imaging. A discussion of the imaging parameters includes voxel size, matrix size, TR, and TE.

The clinical sections start with a survey of normal anatomy. Pediatric neurological diseases include the areas of congenital anomalies and neoplasms. Adult diseases range from neoplasms and trauma, including hemorrhage, to white matter disease and spinal disorders.

The text is well written but the scans are of fair-to-good quality. The major shortcoming of this book is that it was written before the introduction of intravenous (IV) contrast, gadolinium, which has changed the manner many diseases, especially neoplasms, are evaluated. However, the volume still deserves a place in the physician's library as an excellent review of physics and an evaluation of diseases that would not need IV contrast MRI. ☐ Neil B. Horner, MD

CURRENT GENITOURINARY CANCER SURGERY

E. David Crawford, MD, and Sakti Das, MBBS. Philadelphia, PA, Lea and Febiger, 1990. I love a surgical textbook with big, beautiful illustrations teaching physicians how to do complicated operations that are not often performed. Many physicians do not have the opportunities to perform cystectomies or radical prostatectomies, to say nothing of various forms of continent urinary diversion. It is helpful to have a few how-to suggestions from those physicians with experience. This book is a compilation of articles by many outstanding urologists. It is a very good and useful book for urologists who are going to tackle these procedures from time to time, with trepidation. ☐ Robert Zufall, MD

FETAL & NEONATAL CARDIOLOGY

Walker A. Long, MD. W.B. Saunders Company, Philadelphia, PA, 1990. This encyclopedic, multiauthored book attempts to fill an enormous void in contemporary medicine—the rapidly expanding field of perinatal cardiology—and succeeds admirably. If not already, it soon will be the classic reference text for this ultraspecialty. It is not easy reading; even cursory perusal requires extreme diligence especially for the nonresearcher, pedestrian cardiologist. Unusual features include extensive illustrations designed "to inform and delight the reader," voluminous references (the chapter on pulmonary hypertension of the newborn has 335 notations), and "historical perspectives" at the beginning of each chapter that represent "extensive sleuthing" to identify the first discoverer of a disorder or procedure.

Part one is a rigorous analysis of current thinking in developmental structure and function gleaned primarily from the laboratories of scholarly "young turks." I agree with Dr. Long that clinicians not familiar with this information "put themselves and their patients at a disadvantage"; yet, many may be unable or unwilling to expend the effort necessary to digest this material.

Part two deals with the exploding field of fetal cardiology. It includes excellent chapters on genetics, maternal problems affecting the fetus, fetal electrocardiography, and echocardiography as well as diagnosis and management of important cardiac problems.

Part three is an exhaustive study of neonatal cardiology, and, for me, is the highlight of the book. It is divided into four sections describing diagnostic modalities, cardiovascular disorders of the preterm and the term neonate, and therapeutic modalities (medical, interventional, and surgical). The only criticism I can offer is that like most other multiauthored texts, this one suffers from certain imbalances. For example, the chapter on blood gases is nearly twice as long as that on clinical examination. Further, the discussions of electrocardiography, echocardiography, cardiac catheterization, and teratogenic agents are skimpy, while those concerning anesthesia for neonatal cardiac surgery and persistent pulmonary hypertension of the newborn are ponderous. On the other hand, the information and illustrations contained in total anomalous pulmonary venous drainage and chest radiography (plain films only) deserve honorable mention. A very special review of postoperative intensive care is saved for last. In addition to a thorough scientific and clinical analysis, Denfield and Henry close with a poignant plan for dealing with family, community, hospital staff, and physician when a neonate with congenital heart disease dies.

I recommend this book to neonatalogists, pediatricians, pediatric cardiologists, and surgeons with the caveat that appreciation of its content will be a demanding but rewarding task. ☐ Edwin L. Rothfeld, MD

OSTEOPOROSIS

John F. Aloia, MD. Leisure Press, Champaign, IL, 1989. This book, intended for health care professionals, is an excellent review of the topic covering all areas: definition, anatomy and physiology, risk factors, prevention, and treatment. The text is not intended for specialists in the field; it is not too basic to be of use to the family practitioner as a review of the subject.

The chapters on rehabilitation and exercise for the patient with this disorder are informative for the physician as they generally are not included in medical literature on the subject. The chapter on nutrition is another phase of the subject probably not familiar to many physicians in any detail, as this generally is delegated to the dietary service. I feel this book is recommended reading for anyone interested in osteoporosis. ☐ Christine E. Haycock, MD

PHYSICAL ACTIVITY AND AGING

Waneen W. Spirduso (ed). Human Kinetics Books, Champaign, IL, 1989. This book is a compilation of papers from presentations given at the American Academy of Physical Education meeting in 1988. Written by investigators thoroughly knowledgeable in this area, it is a collection well worth reading for any physician interested in geriatrics. The papers on physical activity in the elderly, and on exercise prescriptions for them will be particularly informative to the physician who does not normally deal with these topics. The physical, psychological, and physiological changes occurring with aging are well covered and informative. The papers generally are well written, referenced, and illustrated as required. I recommend the book to all physicians for general reading. ☐ Christine E. Haycock, MD

Pediatric Cancer Mortality Rates

in New Jersey and the United States

DONA SCHNEIDER, PhD
MICHAEL R. GREENBERG, PhD
BONNIE STACH, MCRP

The authors studied pediatric mortality rates for four major categories of neoplasms for the years 1950 to 1985. This report indicates differences in trends between the rates of the New Jersey population and of the United States population, for males and females, and whites and nonwhites.

Published more than a decade ago by the National Cancer Institute, the *Atlas of Cancer Mortality for U.S. Counties 1950-1969* drew attention to major differences in the regional distribution of cancer deaths. After adjusting for differences in age, race, and sex, the *Atlas* indicated some regions had 50 percent higher rates than others.[1] Recent time series studies have shown the differences in cancer mortality among states to be decreasing.[2,3] Reasons offered to explain this convergence of rates include urbanization of formerly rural areas, increasing homogeneity of culture, interregional migration, better reporting and accuracy of incidence and mortality data in formerly rural areas, and the declining importance of European-born Americans and their cultural habits.

New Jersey is a sentinel state for national cancer trends. The *Atlas* showed that New Jersey exhibited the highest white male overall cancer mortality rate in the United States and the second highest white female rate. The *Atlas* and other studies showed relatively high cancer mortality rates for respiratory, digestive, and urinary tract cancers for the male and female white subpopulations in the New Jersey metropolitan corridor.[4,5] Yet, recent research shows rapid decline of age-adjusted rates in New Jersey compared to the remainder of the United States,

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Table 1. Pediatric mortality for malignant neoplasms, 1950-1985.

Population Characteristics			New Jersey				United States		
					95 Percent Confidence Interval				
Year	Race	Sex	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	Lower Limit	Upper Limit	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	Age-Adjusted Rate Index (NJ/US)
Total, 0-24 Years of age			1926	9.14	8.80	9.51	58515	8.18	1.12
1950-1959	White	Male	1022	10.64	10.25	11.06	30089	9.61	1.11
		Female	756	7.88	7.33	8.47	22662	7.22	1.09
	Nonwhite	Male	79	8.36	6.66	10.45	3126	7.31	1.14
		Female	69	7.44	5.94	9.45	2638	5.94	1.25
Total, 0-24 Years of age			1839	8.36	8.05	8.69	52095	7.55	1.11
1960-1961 1964-1969	White	Male	940	9.77	9.15	10.41	26832	9.03	1.08
		Female	718	7.37	6.85	7.94	19464	6.53	1.13
	Nonwhite	Male	93	7.17	5.82	8.82	3161	6.83	1.05
		Female	88	6.57	5.30	8.15	2638	5.47	1.20
Total, 0-24 Years of age			1887	6.44	6.20	6.69	56241	6.09	1.06
1970-1979	White	Male	983	8.02	7.52	8.54	28919	7.50	1.07
		Female	649	5.37	4.97	5.80	19433	5.14	1.05
	Nonwhite	Male	151	6.28	5.34	7.39	4270	5.43	1.16
		Female	104	4.07	3.34	4.97	3380	4.23	0.96
Total, 0-24 Years of age			871	5.28	4.94	5.64	26474	4.78	1.10
1980-1985	White	Male	403	6.06	5.49	6.69	13129	5.77	1.05
		Female	320	4.95	4.43	5.53	8979	4.09	1.21
	Nonwhite	Male	78	4.58	3.82	5.73	2462	4.61	0.99
		Female	70	4.13	3.24	5.25	1904	3.57	1.16

especially among middle-aged populations. In other words, cancer mortality rates are converging between New Jersey and the United States.[3,5]

Is New Jersey also a sentinel state for pediatric cancer? Are New Jersey's pediatric rates converging with the United States? To answer these questions, the authors are researching the cancer incidence data that became available in 1979, the year the New Jersey Cancer Registry began collecting information. To gain a perspective of what has happened in pediatric cancer in New Jersey and the United States over time, it is necessary to use mortality data. The authors present an analysis of mortality data as historical background and identify possible future incidence-based cancer studies.

DATA AND METHODS

Data. Cancer mortality counts for New Jersey and the United States for 1950 to 1985 were obtained from the United States Department of Health and Human Services' annual publication of mortality statistics.[6] As death certificates are repatriated to reflect state of residence, all cases of New Jersey residents that died out of state were included in the analysis. [This repatriation answers the problem of New Jersey cases treated in Philadelphia and New York, a major draw of cancer patients to regional cancer centers over the 36-year period.]

In order to study pediatric age groups, the mortalities were aggregated into the following three age categories: 0 to 4, 5 to 14, and 15 to 24. These categories represent aggregates of standard five-year age groupings reported by vital statistics. Deaths in the 19-to-24-year age group were included as they were likely to have been diagnosed before age 19, a routine pediatric age cutoff point.

Table 2. Pediatric mortality for leukemia and aleukemia, 1950-1985.

Population Characteristics			New Jersey				United States		
					95 Percent Confidence Interval				
Year	Race	Sex	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	Lower Limit	Upper Limit	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	Age-Adjusted Rate Index (NJ/US)
Total, 0-24 Years of age			772	3.32	3.09	3.57	22698	2.92	1.14
1950-1959	White	Male	426	4.01	3.64	4.42	11841	3.48	1.15
		Female	296	2.79	2.49	3.13	9138	2.68	1.04
	Nonwhite	Male	30	2.98	2.01	4.26	965	2.07	1.44
		Female	20	1.87	1.14	2.88	754	1.53	1.22
Total, 0-24 Years of age			687	2.87	2.66	3.10	20431	2.79	1.03
1960-1961 1964-1969	White	Male	347	3.29	2.96	3.65	10775	3.41	0.97
		Female	284	2.70	2.40	3.04	7811	2.49	1.08
	Nonwhite	Male	33	2.40	1.65	3.38	1082	2.24	1.08
		Female	23	1.61	1.02	2.42	763	1.48	1.09
Total, 0-24 Years of age			683	2.25	2.09	2.43	19508	2.07	1.09
1970-1979	White	Male	352	2.78	2.50	3.09	10114	2.56	1.09
		Female	244	1.96	1.72	2.23	7092	1.84	1.06
	Nonwhite	Male	54	2.13	1.60	2.79	1359	1.68	1.27
		Female	33	1.19	0.82	1.68	943	1.15	1.03
Total, 0-24 Years of age			273	1.65	1.46	2.10	8446	1.52	1.09
1980-1985	White	Male	124	1.86	1.55	2.23	4278	1.88	0.99
		Female	100	1.55	1.27	1.89	2867	1.31	1.18
	Nonwhite	Male	19	1.11	0.67	1.73	772	1.43	0.78
		Female	30	1.75	1.18	2.50	529	0.98	1.79

The aggregate age groups were broken down by sex and race: white male, white female, nonwhite male, and nonwhite female. Nonwhite data were an aggregate of black, Asian, American Indian, and all other racial groups not considered purely white. Both United States and New Jersey data were reported in the same manner during these periods.

Data were placed into the following four categories: all malignant neoplasms (ICD-O 800-999), leukemia and aleukemia (ICD-O 980-994), lymphosarcoma and related neoplasms (ICD-O 959-969), and all other malignant neoplasms (all cancers minus leukemia and aleukemia, lymphosarcoma, and related neoplasms). While the use of the terms aleukemia (leukemia cases presenting with normal or low white blood counts) and lymphosarcoma are archaic, these terms are used by governmental reporting sources and provide consistency of reporting throughout the entire 36-year time period. The categories were chosen as likely to yield the most information on pediatric cancer mortality, and were aggregated in order to yield sufficient cases for analysis. Deaths from other important pediatric cancers in this report are included in the "all other" category.

The pediatric age, sex, and race cancer mortality data for New Jersey and the United States then were aggregated into four time periods: 1950 to 1959, 1960 to 1969, 1970 to 1979, and 1980 to 1985. As New Jersey did not collect racial data for 1962 and 1963, these two years were omitted from the analysis for both New Jersey and the United States; the 1960 to 1969 block, then, represents only eight years.

In 1979, mortality data published by the United States Department of Health and Human Services was broken down further into the following racial

Table 3. Pediatric mortality for lymphosarcoma and related neoplasms, 1950-1985.

Population Characteristics			New Jersey				United States		
Year	Race	Sex	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	95 Percent Confidence Interval Lower Limit	Upper Limit	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	Age-Adjusted Rate Index (NJ/US)
Total, 0-24 Years of age			259	1.44	1.27	1.63	7621	1.20	1.20
1950-1959	White	Male	145	1.77	1.50	2.09	4492	1.61	1.10
		Female	92	1.14	0.93	1.41	2404	0.87	1.30
	Nonwhite	Male	13	1.58	0.84	2.70	457	1.19	1.33
		Female	9	1.12	0.51	2.13	268	0.64	1.74
Total, 0-24 Years of age			285	1.51	1.34	1.70	7569	1.22	1.24
1960-1961 1964-1969	White	Male	162	1.94	1.66	2.27	4472	1.65	1.17
		Female	101	1.25	1.02	1.53	2288	0.88	1.43
	Nonwhite	Male	16	1.31	0.75	2.12	486	1.14	1.15
		Female	6	0.55	0.20	1.20	292	0.66	0.84
Total, 0-24 Years of age			258	0.93	0.82	1.05	7545	0.84	1.10
1970-1979	White	Male	137	1.16	0.98	1.38	4414	1.17	1.00
		Female	77	0.68	0.54	0.85	2194	0.60	1.14
	Nonwhite	Male	25	1.05	0.68	1.55	610	0.80	1.30
		Female	19	0.81	0.49	1.26	327	0.43	1.90
Total, 0-24 Years of age			142	0.87	0.74	1.03	3304	0.60	1.45
1980-1985	White	Male	83	1.26	1.01	1.58	1853	0.82	1.54
		Female	42	0.65	0.47	0.89	971	0.44	1.48
	Nonwhite	Male	12	0.71	0.37	1.24	308	0.60	1.18
		Female	5	0.31	0.10	0.72	172	0.33	0.94

groups: white, nonwhite, and black. The new black component of the data represents a subgroup of the nonwhite category. State data, as well as national data, were reported in this manner.

In order to make comparisons of age-adjusted rates among the black population, mortality data were grouped by sex and race in the following manner for 1979 to 1985: white male, white female, nonwhite male, nonwhite female, black male, and black female. The age groups remained the same.

Methods. The methodological approach was to compute and to compare cancer mortality rates for New Jersey and the United States. The mortality counts were divided by the numbers of residents in each age, sex, and racial group, yielding age-specific rates. The resident population, or the population-at-risk figures for the years 1950 to 1980, were obtained from United States Bureau of the Census decennial census counts and from the Bureau's 1988 revision of population estimates for the years 1981 to 1987. [The Bureau's figures for the study years 1981 to 1985 are estimates; the authors question the accuracy of the population-at-risk data for those years; nonetheless, we follow the convention of using them for these studies.[3,6]]

The direct method of calculating age-adjusted rates was used to mathematically control for age differences between the population of New Jersey and that of the United States. This allows New Jersey's rates to be compared to other states. The 1980 population of the United States was used as the population standard for the age-adjusting process. Confidence limits were calculated for the New Jersey age-adjusted rates using the method of Chiang and are presented along with the data in tabular form.[7]

Data are presented in tabular and graphical for-

Table 4. Pediatric mortality for all other neoplasms, 1950-1985.

Population Characteristics			New Jersey				United States		
					95 Percent Confidence Interval				
Year	Race	Sex	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	Lower Limit	Upper Limit	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	Age-Adjusted Rate Index (NJ/US)
Total, 0-24 Years of age			895	4.38	4.10	4.68	28196	4.07	1.08
1950-1959	White	Male	451	4.86	4.43	5.34	13756	4.53	1.07
		Female	368	3.95	3.56	4.38	11120	3.66	1.08
	Nonwhite	Male	36	3.80	2.66	5.26	1704	4.05	0.94
		Female	40	4.45	3.18	6.05	1616	3.76	1.18
Total, 0-24 Years of age			867	3.98	3.72	4.26	24095	3.54	1.12
1960-1961 1964-1969	White	Male	431	4.55	4.14	5.01	11585	3.97	1.15
		Female	333	3.42	3.07	3.81	9365	3.17	1.08
	Nonwhite	Male	44	3.45	2.50	4.64	1593	3.45	1.00
		Female	59	4.41	3.38	5.74	1583	3.34	1.32
Total, 0-24 Years of age			946	3.26	3.06	3.48	29188	3.19	1.02
1970-1979	White	Male	494	4.08	3.73	4.46	14391	3.78	1.08
		Female	328	2.73	2.45	3.05	10147	2.69	1.01
	Nonwhite	Male	72	3.10	2.80	3.44	2301	2.95	1.05
		Female	52	2.07	1.55	2.72	2110	2.65	0.78
Total, 0-24 Years of age			456	2.76	2.52	3.03	14724	2.65	1.04
1980-1985	White	Male	196	2.94	2.55	3.39	6998	3.07	0.96
		Female	178	2.75	2.37	3.19	5141	2.34	1.18
	Nonwhite	Male	47	2.76	2.03	3.68	1382	2.59	1.06
		Female	35	2.07	1.44	2.88	1203	2.26	0.92

mats. Tables present New Jersey pediatric deaths and pediatric mortality rates in cancer deaths/ 100,000 population-at-risk compared to United States rates for the aggregate 0-to-24-year age group, by race, sex, and select cancers. For the ease of the reader, ratios appear in the Tables as the age-adjusted rate index. This index is the New Jersey rate divided by the United States rate. An index of 1.0 indicates that both New Jersey and the United States had the same rate. An index greater than 1.0 indicates that the New Jersey rate is higher; less than 1.0 indicates that New Jersey's rate is lower. By comparing the index over time, trends can be observed. For instance, Table 1 presents pediatric mortality data for all malignant neoplasms. For white males, the index is 1.11 for the period 1950 to 1959, 1.08 for the period 1960 to 1969, 1.07 for the period 1970 to 1979, and 1.05 for the period 1980 to 1985. The ratio shows that mortality for white males for all malignant neoplasms, then, is decreasing and converging with that of the United States rate.

Table 2 presents the pediatric mortality data for leukemia and aleukemia. Table 3 presents data for lymphosarcoma and related neoplasms. Table 4 is mathematically derived and represents all other neoplasms, i.e. those not covered by Tables 2 and 3. Table 5 lists pediatric cancer mortality data for the aggregate years 1979 to 1985 for blacks by sex and major cancer type. Table 5 displays the first available data on blacks as a subset of the nonwhite racial grouping; the data are important because they are race specific, even with the small number of deaths.

Selected data are presented graphically, depending on data reliability and suitability for presentation. For instance, the large number of white pa-

Table 5. Black pediatric cancer mortality data, 1979-1985.

			New Jersey				United States		
					95 Percent Confidence Interval				
	Race	Sex	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	Lower Limit	Upper Limit	Total Deaths (0-24)	Age-Adjusted Rate (0-24)	Age-Adjusted Rate Index (NJ/US)
Total, 0-24 Years of age			1038	5.36	5.16	5.58	31301	4.84	1.11
All Pediatric Malignant Neoplasms	Black	Male	79	4.99	3.98	6.23	2443	5.34	0.93
		Female	78	4.86	3.87	6.08	1943	4.17	1.17
Total, 0-24 Years of age			328	1.69	1.51	1.88	10085	1.55	1.09
Leukemia and Aleukemia	Black	Male	18	1.12	0.66	1.77	744	1.60	0.70
		Female	32	1.98	1.36	2.79	528	1.12	1.77
Total, 0-24 Years of age			161	0.84	0.72	0.99	3883	0.61	1.38
Lymphosarcoma and Related Neoplasms	Black	Male	12	0.79	0.41	1.38	319	0.72	1.10
		Female	4	0.25	0.07	0.64	168	0.37	0.69
Total, 0-24 Years of age			549	3.67	3.37	4.76	17333	3.28	1.12
All Other Neoplasms	Black	Male	49	3.08	2.28	4.08	1380	3.01	1.02
		Female	42	3.41	2.46	4.61	1247	3.28	1.04

tients and the resultant small confidence limits make these data both reliable and suitable. Tables 1 through 5 show confidence limits for our sample. No confidence limits are provided for the United States data as they represent the total population. Nonwhite cases have significant numbers of cases, but the category is so racially nonspecific it is hard to draw firm conclusions. Black data are racially specific, but the numbers of cases are small and the confidence limits so large that graphical presentation is ineffective.

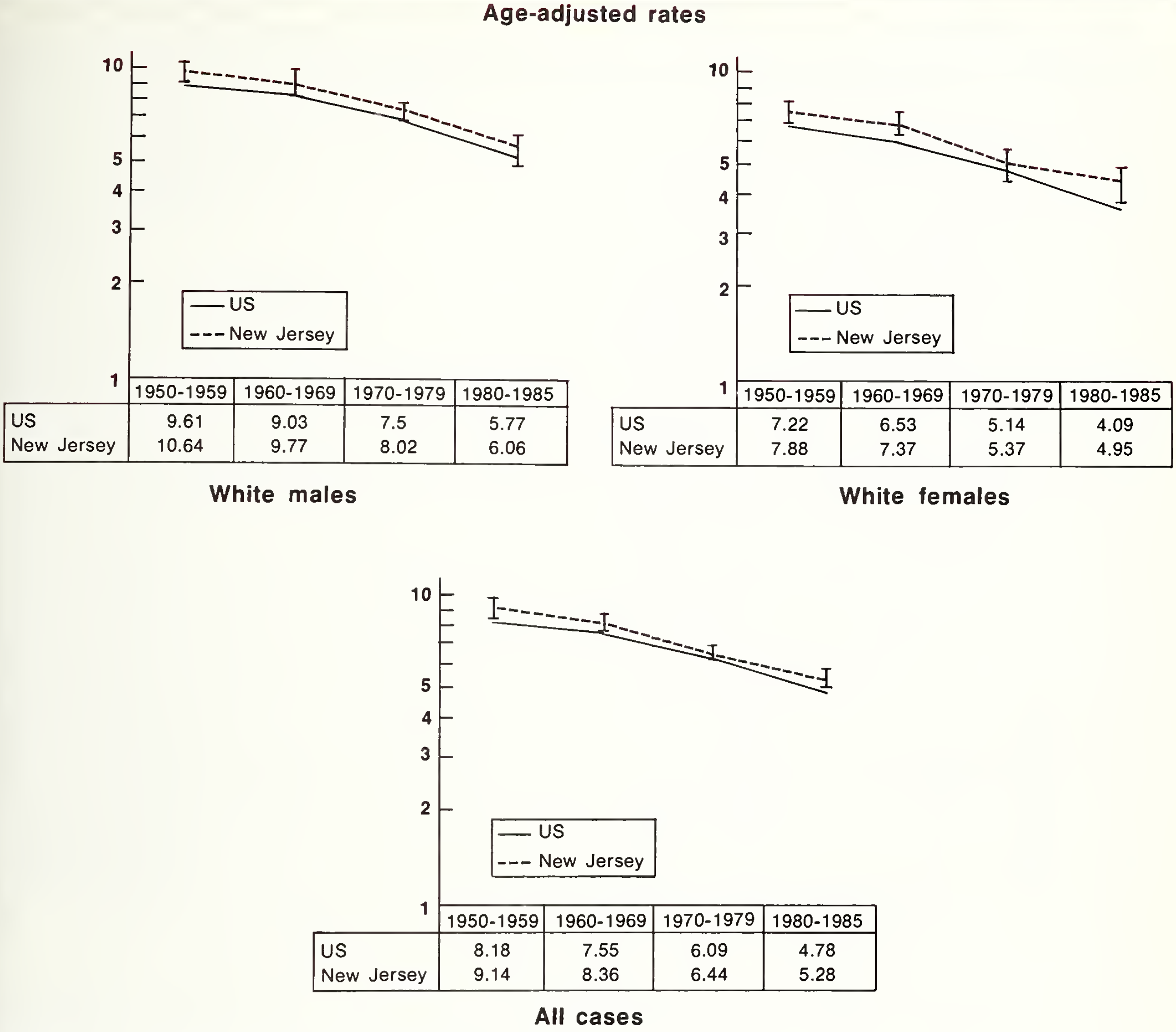
RESULTS

Data in Table 1 and Figure 1 show that all four New Jersey subpopulations had higher pediatric cancer mortality rates than the United States in the period 1950 to 1959. These rates declined over time, although not at the same rate for all sex and racial groups or for all types of cancer.

White male rates fell from 10.64/100,000 in 1950 to 1959 to 6.06/100,000 in 1980 to 1985, and the age-adjusted rate index declined from 1.11 to 1.05. The 95 percent confidence bands for the white male New Jersey rate for 1980 to 1985 include the United States rate. White female rates declined from 7.88 to 4.95. The age-adjusted rate index ratio for this group decreased from 1.09 in 1950 to 1959 to 1.05 during 1970 to 1979, yet it increased to 1.21 in 1980 to 1985. Consequently, the white female rates do not follow the expected converging pattern.

Nonwhite male rates in New Jersey decreased from 8.36 to 4.58 and the age-adjusted rate index ratio decreased from 1.14 to 0.99 from 1950 to 1959 to 1980 to 1985. For nonwhite females, the rates decreased from 7.44 to 4.13, and the age-adjusted rate index ratio decreased from 1.25 to 1.16. The 95 percent confidence bands for both the New Jersey nonwhite male and nonwhite female rates include the United States rates. In other words, pediatric cancer mortality in New Jersey and United States nonwhite subgroups follow the expected convergent pattern.

The data indicate the different pediatric mortality rates of subpopulations for the category all malignant neoplasms. In order to look at this phenomenon more closely, we disaggregated the data into three



	1950-1959	1960-1969	1970-1979	1980-1985
US	9.61	9.03	7.5	5.77
New Jersey	10.64	9.77	8.02	6.06

White males

	1950-1959	1960-1969	1970-1979	1980-1985
US	7.22	6.53	5.14	4.09
New Jersey	7.88	7.37	5.37	4.95

White females

	1950-1959	1960-1969	1970-1979	1980-1985
US	8.18	7.55	6.09	4.78
New Jersey	9.14	8.36	6.44	5.28

All cases

Figure 1. Pediatric mortality for malignant neoplasms.

major subgroupings of childhood cancer: leukemia and aleukemia, lymphosarcoma and related neoplasms, and all other pediatric cancers; Tables 2, 3, and 4 and Figures 2 and 3 present these findings.

Table 2 lists the data for pediatric mortality from leukemia and aleukemia. A graphical presentation of all cases and white data is presented in Figure 2. Pediatric mortality from this disease category decreased during the study period for all four subpopulations.

Table 2 shows United States age-adjusted mortality rates for leukemia and aleukemia to have the largest decrease for white males (from 3.48 to 1.88), and the smallest decrease for nonwhite females (1.53 to 0.98). The New Jersey data show the same pattern, again with the largest decrease for white males (from 4.01 to 1.86) and the smallest decrease for nonwhite females (1.87 to 1.75).

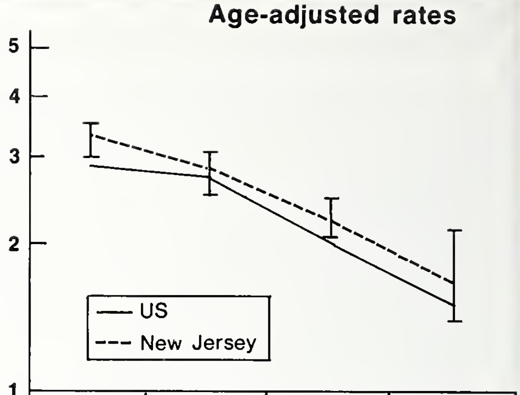
The age-adjusted ratio data showed that all four New Jersey subpopulations started out with higher rates than the United States subpopulation, in the 1950 to 1959 period, but that white male and nonwhite male rates rapidly converged. Female white and nonwhite ratios fluctuate and reverse their downward trend in the 1980 to 1985 period. Of all the subgroups, however, only New Jersey nonwhite females in 1980 to 1985 have an age-adjusted mortality rate with confidence bands that do not include the United States rate. Overall, male leukemia and aleukemia generally follow the expected pattern of convergence with United States rates, but female rates do not converge.

Table 3 presents the data on pediatric mortality from lymphosarcoma and related neoplasms. Due to data collections methods during the early years of the study period, it is not possible to distinguish

Hodgkin's disease from non-Hodgkin's lymphoma. This is a serious drawback, as the prognosis for these diseases is very different, with Hodgkin's disease having a lower mortality rate.[8,9]

The age-adjusted mortality rates for all four subpopulations for lymphosarcoma and related neoplasms began significantly higher for New Jersey pediatric patients in the 1950 to 1959 period. The data show that the rates fall substantially for all four subgroups, with the largest decrease for New Jersey residents among nonwhite males (1.58 to 0.71) and the smallest decrease among white females (1.14 to 0.65).

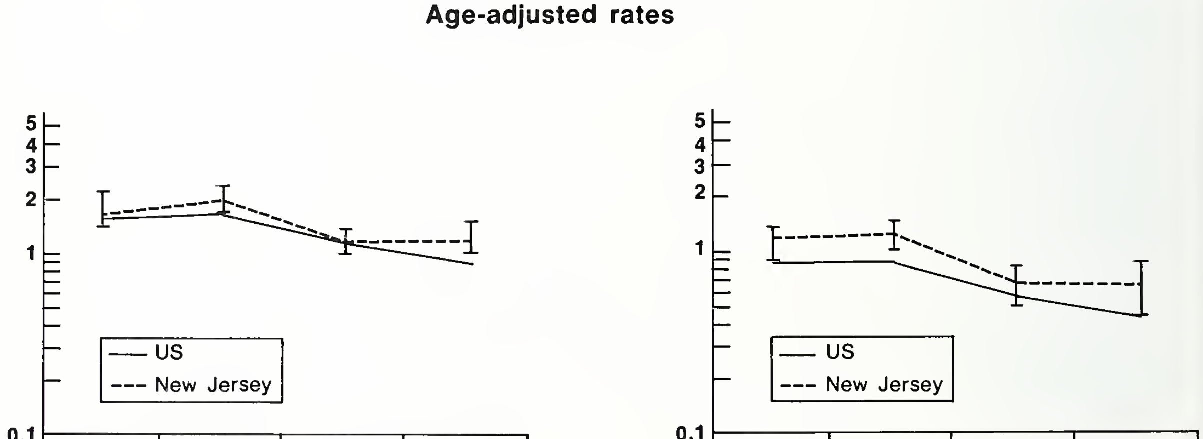
White male and white female rates diverged from the United States rate for lymphosarcoma and related neoplasms in 1960 to 1969, converged during 1970 to 1979, and diverged again by 1980 to 1985. Nonwhite rates seem to converge, although the rela-



	1950-1959	1960-1969	1970-1979	1980-1985
US	2.92	2.79	2.07	1.52
New Jersey	3.32	2.87	2.25	1.65

All cases

Figure 2. Pediatric mortality for leukemia and aleukemia.

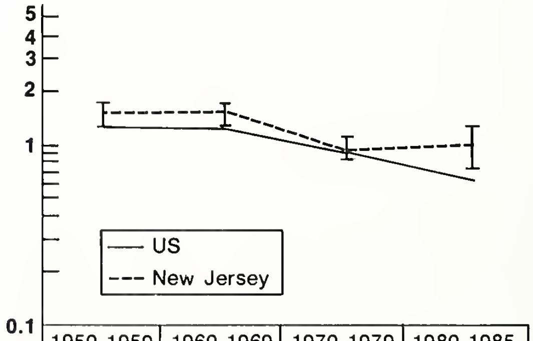


	1950-1959	1960-1969	1970-1979	1980-1985
US	1.61	1.65	1.17	0.82
New Jersey	1.77	1.94	1.16	1.26

White males

	1950-1959	1960-1969	1970-1979	1980-1985
US	0.87	0.88	0.6	0.44
New Jersey	1.14	1.25	0.68	0.65

White females



	1950-1959	1960-1969	1970-1979	1980-1985
US	1.2	1.22	0.84	0.6
New Jersey	1.44	1.51	0.93	0.87

All cases

Figure 3. Pediatric mortality lymphosarcoma and related neoplasms.

tive increase during 1970 to 1979 and the small number of cases suggests a cautious reaction to this conclusion. Hence, the data for this disease category, are not consistent with the expected pattern of convergence with United States rates.

Table 4 presents the data on the remainder of deaths from malignant neoplasms, i.e. total pediatric cancer deaths minus those from leukemia and aleukemia and lymposarcomas and related neoplasms. Rates clearly fall, especially among nonwhite females (4.45 to 2.07) and least among nonwhite males (3.80 to 2.76). The data show that for the category of all other neoplasms, New Jersey's subpopulations, except for nonwhite males, started out with higher rates than the United States in the 1950 to 1959 period. Rates for white males, nonwhite males, and nonwhite females converged with national rates by 1980 to 1985, but white female rates did not converge.

Table 5 gives an aggregate of black pediatric cancer mortality data for the years 1979 to 1985. These data are offered as they are the only data available that are subset by the racial category black rather than the nonspecific category nonwhite. Black data account for the majority of cases in the nonwhite category in this time period, but this should not be extrapolated backward to encompass earlier time periods when specific racial data were not gathered.

With the caveat that the 1979 to 1985 aggregate data are difficult to interpret due to the small numbers of cases, New Jersey's black male rates are lower than their United States counterparts, and black female rates are higher than their United States counterparts. The number of cases for both sexes is so small that the New Jersey rates fall within the 95 percent confidence bands for the United States rates.

CONCLUSION

The rates for all major cancer groups for all subpopulations in New Jersey and the United States fell during the 36-year study period. Data clearly show that New Jersey had higher rates than the United States for pediatric cancer mortality for all races and genders from 1950 to 1959. Although New Jersey rates have converged with United States rates for some subpopulations for leukemias and all other pediatric cancers, rates remain higher for white females and the category lymphosarcomas. The question remains as to why this phenomenon exists.

Given the inconsistent trends among cancer types and subpopulations, additional epidemiologic research is necessary. Incidence and mortality data for specific pediatric cancers, especially those with converging and diverging rates, i.e. leukemia and lymphosarcoma, should be compared. Another approach is to compare the populations contracting lymphosarcoma in both New Jersey and other states. Comparison of differences in state reporting systems offers a third avenue to explore. A strong cancer incidence data set is critical to these efforts. ■

REFERENCES

1. Mason T, McKay F, Hoover R, et al.: *Atlas of Cancer Mortality for U.S. Counties, 1950-1969.* Washington, DC, DHEW Pub. No. NIH 75-780, 1975.

2. Riggan W, Van Bruggen J, Acquavella J, et al.: *U.S. Cancer Mortality Rates and Trends, 1950-1979, 4 Volumes.* Washington, DC, Superintendent of Documents, EPA/600/1-83/015e, 1983 and 1987.

3. Greenberg MR: *Urbanization and Cancer Mortality.* New York, NY, Oxford University Press, 1983.

4. Greenberg MR, Caruana J, Holcomb B, et al.: High cancer mortality rates from childhood leukemia and young adult Hodgkin's disease and lymphoma in the New Jersey-New York-Philadelphia metropolitan corridor, 1950-1969. *Cancer Research* 40:439-443, 1980.

5. Greenberg M: Death rates in New Jersey. *NJ MED* 85:950-953, 1988.

6. US Bureau of the Census: US Population Intercensal Estimates Methodology. *Current Population Reports.* Series P-23, Number 103 and 158. Washington, DC.

7. Chiang CL: Standard error of the age-adjusted death rate. *Vital Statistics* 47:275-285, 1961.

8. Young JL, Ries LG, Silverberg E, et al.: Cancer incidence, survival, and mortality for children younger than age 15 years. *Cancer* 58:598-602, 1986.

9. Li FP, Bader JL: Epidemiology of cancer in childhood, in Oski FA, Naiman L, in *Hematology of Infancy and Childhood, 3rd Edition.* Philadelphia, PA, W.B. Saunders Company, 1987.

10. US Bureau of the Census: *County and City Data Book, 1967.* US Government Printing Office, Washington, DC, 1967.

11. US Bureau of the Census: *County and City Data Book, 1983.* US Government Printing Office, Washington, DC, 1983.

12. Wellington DG, Macdonald EJ, Wolf PF: *Cancer Mortality: Environmental and Ethnic Factors.* New York, NY, Academic Press, 1979, p. 228.

13. Segi M: Age-adjusted rates for cancer for selected sites (A-classification) in 52 counties in 1973. Segi Institute of Cancer Epidemiology. Nagoya, Japan, March, 1978.

14. US Bureau of the Census: *County and City Data Book, 1972.* US Government Printing Office, Washington, DC, 1972.

15. US Department of Health and Human Services: *Report of the Secretary's Task Force on Black and Minority Health.* Vol. 1. US Government Printing Office, Washington, DC, 1985.

16. US Bureau of the Census: *Statistical Abstract of the United States 1988.* 108th Ed. US Government Printing Office, Washington, DC, 1987.

17. Mausner JS, Kramer S: *Epidemiology—An Introductory Text.* Philadelphia, PA, W.B. Saunders Company, 1965, pp. 72-76.

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Intussusception in Childhood

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We present our experiences with 41 consecutive cases of intussusception. Most cases had a preliminary barium enema performed that successfully reduced the intussusception in 12 cases. Twenty-nine patients were explored surgically; bowel resection was carried out in 6 patients, and surgical reduction was carried out in 23 cases.

Intussusception in childhood is a well-known entity to all pediatricians and pediatric surgeons. The typical idiopathic ileocolic intussusception is characterized by a triad of colic, abdominal mass, and currant jelly stools. The disease most frequently is seen in babies from two months to two years of age, and the finding of a "lead point" is rare in this age group (8 to 10 percent). Ravitch popularized the use of hydrostatic (barium enema) reduction at the Johns Hopkins Hospital in 1939.[1-7] It generally has been accepted as the preferred method of reduction of intussusception, with surgery being reserved for those children where the barium enema fails to reduce the intussusception completely.

We reviewed our experience at UMDNJ-Robert Wood Johnson Medical School over a six-and-one-half-year period. Fifty-six patients were referred to the pediatric surgical service with a diagnosis of intussusception; 41 patients had intussusception confirmed and treated.

MATERIAL AND METHODS

We analyzed the records of all children referred to the pediatric surgical service at UMDNJ-Robert Wood Johnson Medical School, New Brunswick, from June 1981 to February 1988, to rule out intussusception. Patients were seen at Robert Wood Johnson University Hospital or St. Peter's Medical Center. A total of 56 patients were referred, and intussusception was confirmed in 41 patients. In all patients, a flat (preliminary) film of the abdomen was taken. If small bowel obstruction was present on the flat plate, no attempt was made to reduce the intussusception hydrostatically, but barium was

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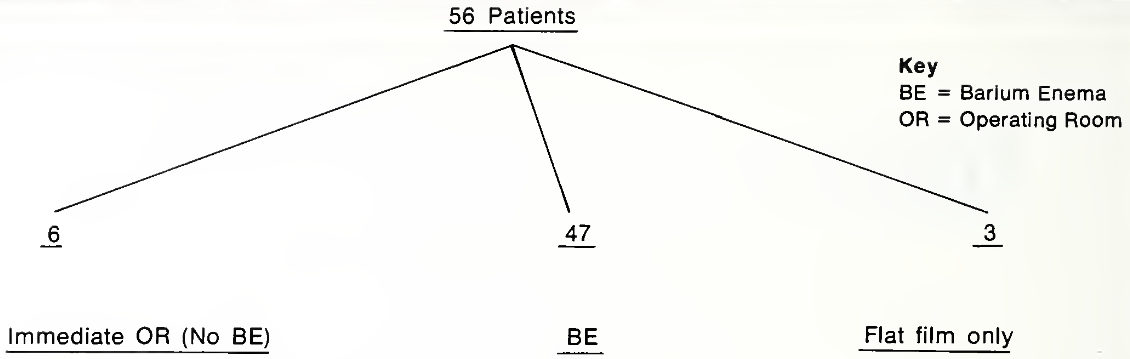

Figure 1. Distribution of patients according to x-ray findings.

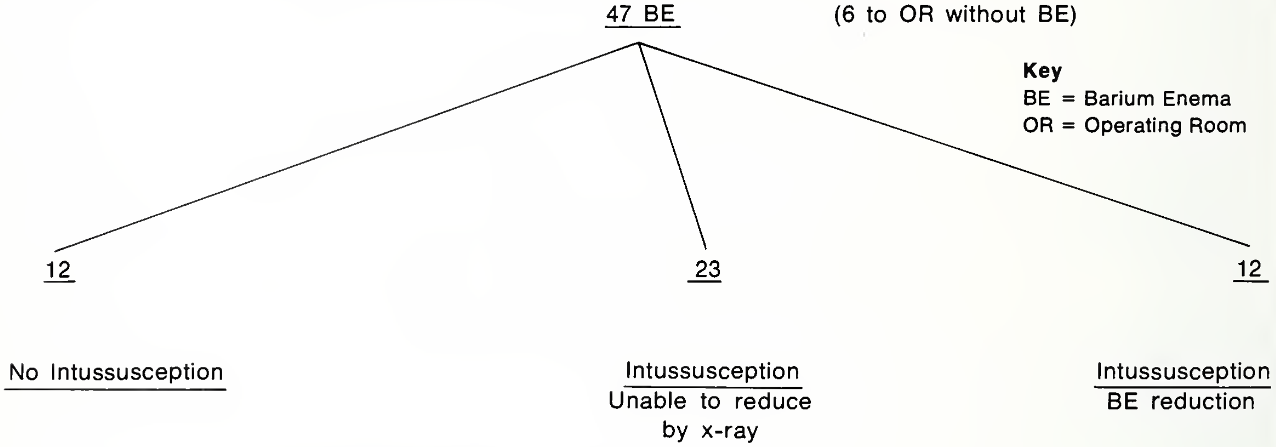

Figure 2. Barium enema performed on 47 patients.

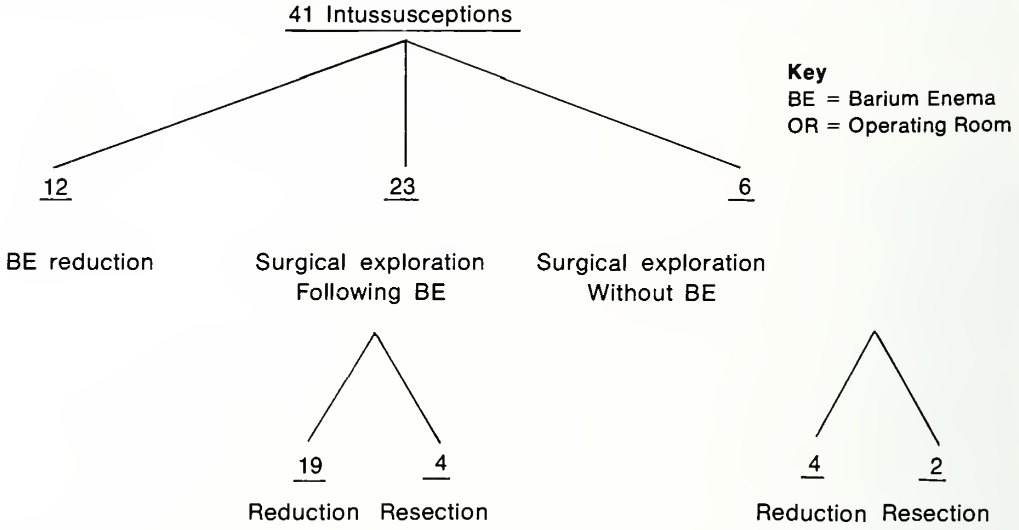

Figure 3. Patients with intussusception.

used only to confirm the location of the intussusception—to plan the surgical incision.

If the preliminary x-ray was normal but intussusception was suspected, the on-call radiologist performed the barium enema following accepted techniques. In some patients, a #24 or #30 French Foley catheter was utilized and inflated with 15 to 30 cc of air. In other patients, the balloon was not inflated, but the buttocks was taped; in some cases

A. Lead Point = 3
B. Perforation by BE = 1
C. Gangrenous Intussusception = 3

Lead Points

Ileal Duplication: 2
Meckel's Diverticulum: 1

Figure 4. Breakdown of the seven surgical resections.

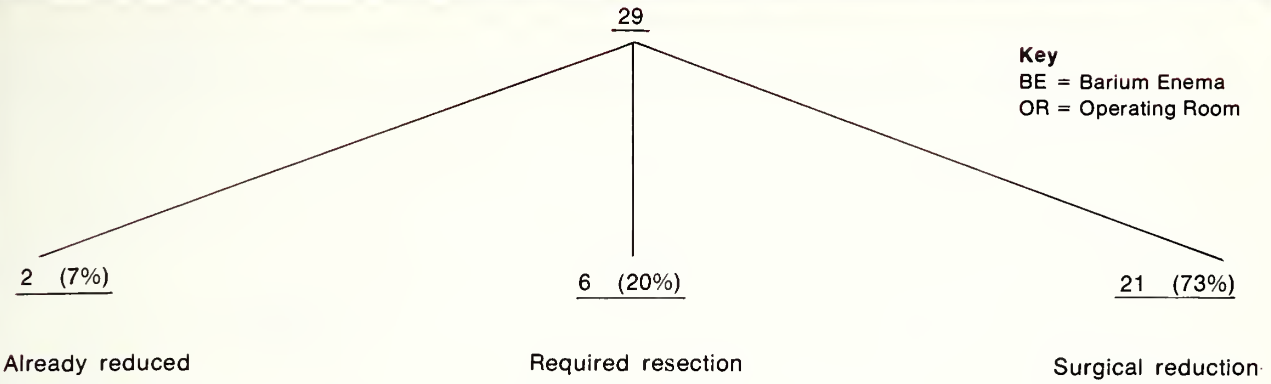

Figure 5. The breakdown for the 29 surgical procedures.

the buttocks was compressed manually. The barium bag was elevated three feet above the tabletop prior to the attempted hydrostatic reduction. Most of the children were sedated and, unless there was free reflux of barium into the small bowel, the child was explored immediately after the enema.

If successful hydrostatic reduction was carried out, the children were admitted to the hospital, kept fasting, and given intravenous infusions until it was obvious they did not re-intussuscept. In some cases, crushed charcoal was placed in the stomach by nasogastric tube, and when charcoal was present in the stools, the children were fed. In other cases, the children were fed when flatus was passed and the abdomen was soft.

RESULTS

Distribution of patients according to x-ray findings. As seen in Figure 1, of 56 patients referred with a diagnosis of intussusception, 3 patients had flat films, and on the basis of history and clinical evaluations, were determined not to be suspicious for intussusception and no barium enema was performed. Six patients were taken to the operating room immediately (without barium enema). Of these, 5 patients had an obvious intussusception with advanced small bowel obstruction on x-ray, and no barium enema was performed. One patient, who had a perforation of the cecum during the performance of the barium enema at another hospital, was operated on immediately, and had a bowel resection and an ileostomy performed. Forty-seven patients had barium enemas after flat plates were taken.

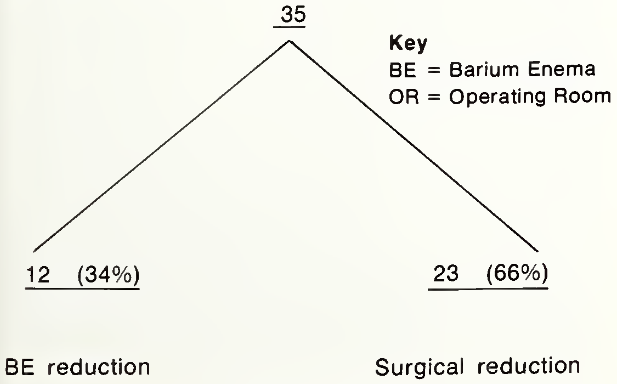

Figure 6. The number of barium enemas showing intussusception.

Forty-seven patients had barium enemas performed and intussusception demonstrated in 35 patients: 12 patients having a "normal" barium enema (no intussusception) (Figure 2). In 12 of these 35 patients, complete reduction of the intussusception was accomplished by barium enema and the patients were discharged without surgery and without recurrence. In 23 patients, complete reduction of the intussusception was not successful and the patients were explored (Figure 3). In 2 of the 23 patients, the intussusception was found to be completely reduced at exploration (Figure 5).

Surgical reduction and surgical resection. Of 23 patients explored for failure of the barium enema to reduce the intussusception, surgical reduction by "milking" was accomplished in 19 patients, and in 4 patients a bowel resection (ileocolic) was carried out. Similarly, of the 6 patients explored immediately, surgical reduction was accomplished in 4 patients, and a bowel resection was necessary in 2 patients (1 patient had a perforated cecum during the performance of the barium enema) (Figure 4). Of the 5 patients with advanced small bowel obstruction, only 1 patient required a bowel resection. Of 29 surgical explorations, bowel resection was necessary in 6 patients (21 percent) and surgical reduction was carried out in 23 patients (79 percent) (Figure 5).

Indication for surgical resection. One resection was necessary because of perforation of the cecum during the performance of a barium enema. After successful surgical reduction, masses were noted in two patients in the mesenteric surface of the ileum and the cecum, ileal duplications acting as lead points; ileocolic resections were carried out. In one

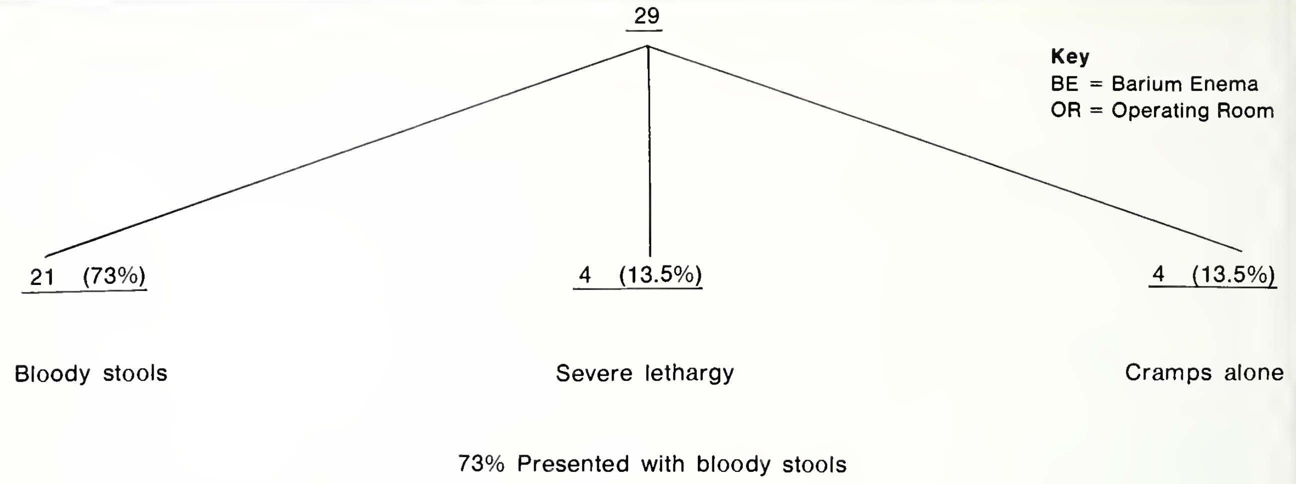

Figure 7. The 29 surgical patients.

patient, an ileo-ileo-colic intussusception was present and the lead point was an inverted Meckel's diverticulum. In view of the edema of the Meckel's, the abdomen was closed and three days later the patient was re-explored and the diverticulum was resected.

In three patients, an ileocolic resection was carried out because a gangrenous, irreducible intussusception was present. All surgical patients received antibiotics preoperatively and for five to seven days, postoperatively. When no perforation was present, a primary resection and anastamosis was carried out on unprepared bowel, and no leakage or wound infections occurred. Figure 5 outlines the surgical findings in 29 surgical explorations.

Success rate of barium enema reduction. The total number of successful barium enema reductions was 12, or 34 percent of all the barium enemas showing intussusception (Figure 6). If we include the 2 patients in whom the intussusception was found to be reduced at exploration, the success rate of barium enema reduction is 14 patients or 40 percent.

Presentation with bloody stools and other methods of presentation. Twenty-seven of 41 patients presented with bloody stools ("currant jelly"), an incidence of 65 percent. Of the 12 patients who underwent successful barium enema reductions, 6 patients presented with bloody stools (50 percent). The clinical features of 29 surgical patients are shown in Figure 7. Seventy-three percent of those patients requiring surgical exploration presented with bloody stools, 13.5 percent presented only as lethargy, and most of these patients had spinal taps and were admitted with a diagnosis of meningitis or sepsis, and 13.5 percent presented with colic alone.

Duration of symptoms. Accurate data on duration of symptoms were available on 26 surgical patients, and in 88 percent, symptoms were present over 12 hours. Accurate data on the 12 hydrostatic reductions were not available (Figure 8).

Time of year. Our data in Figure 9 did not demonstrate any increased incidence during any particular season.

Barium enema of 12 patients without intussusception. Twelve patients did not demonstrate an intussusception on the barium enema, and their x-rays initially were reported as "normal." On review of their x-rays, although no intussusceptions were found, the barium enemas were not without pathology (Figure 10). In 6 patients, very significant lymphoid polyposis of the colon or terminal ileum were found (Figure 11). In 2 patients there was significant "thumbprinting" (Figure 12) with edema and spiculation of the mucosa consistent with Henoch-Schönlein purpura (HSP). In 2 patients, there was severe spasm of the colon requiring intravenous morphine sulfate to complete the barium enema (one of these patients had both HSP with edema of mucosa and severe spasm). In only 3 patients were the enemas completely "normal."

Total Surgical Explorations = 29 (26 Reported)
Under 12 hours = 3
12-24 hours = 11
24-48 hours = 6
Over 48 hours = 6

Figure 8. The duration of symptoms from the study.

41 Cases
Fall = 9 (September, October, November)
Winter = 13 (December, January, February)
Spring = 8 (March, April, May)
Summer = 11 (June, July, August)

Figure 9. Time of the year for the study.

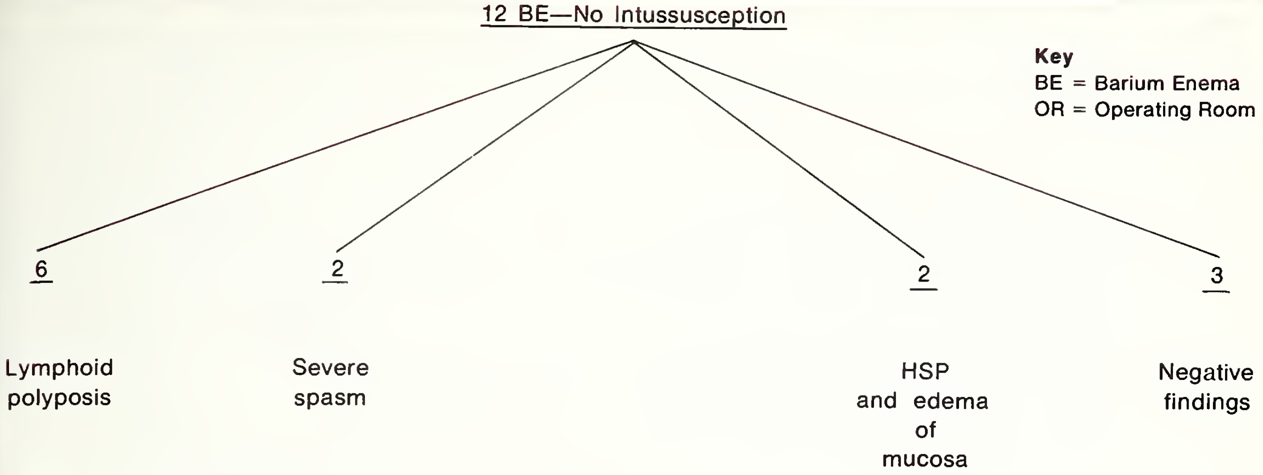

Figure 10. The 12 patients with no intussusception.

DISCUSSION

Until Ravitch reintroduced hydrostatic reduction, the time-honored treatment of intussusception was surgical. In his classical textbook on pediatric surgery, Gross opposed hydrostatic reduction because of delay in operative intervention for those that are irreducible; failure to reduce ileoileal intussusceptions; and overlooking a lead point.[8] Similarly, Potts favored surgical treatment for the same reasons.[9] At the Johns Hopkins Hospital, hydrostatic pressure has been the method of choice for the treatment of intussusception since 1939, with excellent success to 1948.[1] Hirschsprung reported this technique in 1876, and Hipsley, in Australia, reported 100 cases treated by hydrostatic reduction, with a mortality of 5 percent.[10-12] The technique designed by Ravitch is meticulous and demanding and uses a 45 cc Foley bag fully inflated.[2] Of 80 intussusceptions treated by barium enema, 70 percent were reduced by barium enema alone;[3] Ravitch's series probably has the best success rate with hydrostatic pressure, and few reports come close to his figures.[4-7] If all centers followed Ravitch's recommendations meticulously, the success rates probably would improve. Martin reported a 55 percent success rate of barium enema reduction.[13] Coulter and Haller, when reviewing the case material at Johns Hopkins Hospital in 1982, had a 54 percent successful barium enema reduction.[14] Our 34 percent success at barium enema does not compare favorably with other series. A factor may be the large number of different radiologists performing the enemas. (In contrast to many centers, our barium enemas were performed by on-call radiologists—20 radiologists, with different experiences and training in pediatric radiology.)

Surgical exploration was carried out in cases where the barium enema failed to reduce the intussusception, and where the flat film showed mechanical small bowel obstruction. Barium enema reduction was not tried in the face of small bowel obstruction because of a strong likelihood of an ileoileal component, difficult to reduce by barium enema, and the concern that small bowel obstruction may represent an ischemic intussusception. However, a recent paper reported the safety and success of barium enema reduction in spite of apparent small bowel obstruction on the flat film.[15]

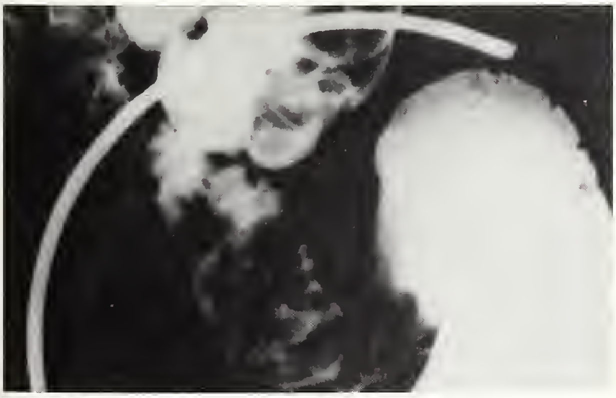

Figure 11. Note the lymphoid polyposis of the terminal ileum.

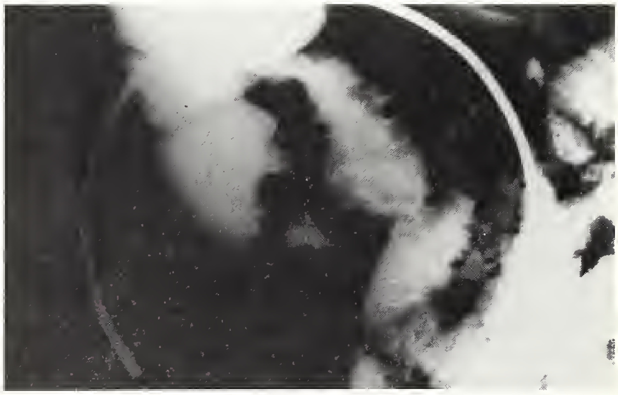

Figure 12. Note the thumbprinting and spiculation of the mucosa in a case of Henoch-Schöenlein purpura.

Our patients had a high incidence of currant jelly stools preceded by abdominal cramps (65 percent). In many series, colic alone is the presenting symptom, and if an intussusception is diagnosed before bloody stools appear, the likelihood of successful reduction by a barium enema is greater. In recent years, lethargy has been reported as a presenting symptom of intussusception.[16] In rare cases, the diagnosis of intussusception was made on the basis of a quiet baby or lethargy alone. In most cases, the appearance of bloody stools made the connection to intussusception for the pediatrician. Perhaps, when examining a baby for lethargy, a rectal should be performed to look for currant jelly stools.

Twenty-three of 26 surgical cases had a history of over 12 hours, and this may be responsible for the failure of barium enema to reduce the intussusception. One should suspect intussusception from rhythmic colicky symptoms alone, even before bloody stools are present. Barium enema in this "early" group has a better chance of reducing the intussusception.

There was no statistical difference in the season of presentation. Ravitch found a peak in midsummer and midwinter, and ascribed this to enteritis and respiratory infections present in these periods.

Of the 12 barium enemas that were "normal," that is, they did not show an intussusception, nine patients had pathology demonstrated on the barium enema. Most commonly, significant lymphoid polyposis was seen either in the colon or in the terminal ileum. Lymphoid polyposis is a self-limited condition often seen in the terminal ileum and may be the result of a viral illness or prior colostomy or ileostomy, and is not a true polyp.[17] It has been reported as a lead point for intussusception.[18-20] These six patients with lymphoid polyposis may have had an intussusception, that reduced spontaneously, or a viral illness; either would explain the crampy abdominal pain. Edema of the mucosa and spiculation suggestive of HSP was seen in two cases, and no surgery was indicated. In two cases, intestinal spasm of unknown origin was present in the colon, requiring great effort to complete the barium enema. Thus, these nine cases were not "normal" but did not show an intussusception.

SUMMARY

Fifty-six children were referred by pediatricians to a teaching hospital with three pediatric surgeons over a six-and-one-half-year period. Forty-seven children had barium enemas performed for diagnosis and 35 children had intussusception demonstrated. Barium enema reductions were carried out on 12 children (34 percent) and surgical explorations were necessary in 29 children (66 percent). Six children were operated upon immediately, without barium enema. The low success rate of hydrostatic reduction (34 percent) is in contrast to a success rate in the literature of 55 to 70 percent. In addition, of the 12 patients who did not have an intussusception on barium enema, 9 patients showed significant pathology on the enema that probably accounted for their complaints. ■

REFERENCES

1. Ravitch MM, McCune RM Jr: Reduction of intussusception by hydrostatic pressure: An experimental study. *Bull Johns Hopkins Hosp* 82:550, 1948.

2. Ravitch MM, McCune RM Jr: Reduction of intussusception by barium enema: A clinical and experimental study. *Ann Surg* 128:904, 1948.

3. Ravitch MM, McCune RM Jr: Intussusception in infants and children. *J Pediatr* 37:153, 1950.

4. Ravitch MM: Consideration of errors in the diagnosis of intussusception. *Am J Dis Child* 84:17, 1952.

5. Ravitch MM: Intussusception in infancy and childhood; an analysis of 77 cases treated by barium enema. *N Engl J Med* 259:1058, 1958.

6. Ravitch MM: *Intussusception in Infants and Children.* Springfield, IL, Charles C. Thomas, 1959.

7. Ravitch MM: *Pediatric Surgery.* Chicago, IL, Yearbook Medical Publishers, 1962, pp. 751-765.

8. Gross RE: *The Surgery of Infancy and Childhood.* Philadelphia, PA, W.B. Saunders Company, 1953, p. 228.

9. Potts WJ: *The Surgeon and the Child.* Philadelphia, PA, W.B. Saunders Company, 1959, pp. 169-170.

10. Hirschsprung H: Tilfaelde of subakut tarminvagination. *Hospitalstid* 3:321, 1876.

11. Hirschsprung H: 107 Falle von darminvagination bei kinder, behandelt im konigin louisen kinderhospital in Kopenhagen wahrend der jahre 1871-1904. *Mitt Gremzgeb Med Chir* 14:555, 1905.

12. Hipsley PL: Intussusception and its treatment by hydrostatic pressure: Based on an analysis of 100 consecutive cases so treated. *MJ Australia* 2:201, 1926.

13. Rosenkrantz JG, Cox JA, Silverman FN, Martin LW: Intussusception in the 1970s: Indications for operation. *J Pediatr Surg* 12:367, 1977.

14. Coulter BB, Haller JA: Unpublished data, 1982.

15. Beasley SW, Campo JF: Radiological evidence of bowel obstruction in intussusception. A contraindication to attempted barium enema? *Pediatr Surg* 2:291, 1987.

16. Braun P, Germann I: Altered consciousness as a precocious manifestation of intussusception in infants. *Nicod Z Kinderchir* 33:307, 1981.

17. Leonidas JC, Krasna IH, Strauss L, et al.: Roentgen appearance of the excluded color after colostomy for infantile Hirschsprung's disease. *Am J Roentgenol, Radium Therapy, Nuc Med* 112:116, 1971.

18. Schenken JR, Kruger RL, Schultz L: Papillary lymphoid hyperplasia of the terminal ileum: An unusual cause of intussusception and gastrointestinal bleeding in childhood. *J Pediatr Surg* 10:259, 1975.

19. Schifter P, Szakall SZ, Varbiro M, Pinter A: Intestinal lymphoid hyperplasia causing pseudopolyposis. *Orv Hetil* 121:2331, 1980.

20. Saito S, Tsuchida Y, Nishina T, et al.: Hypertrophic Peyer's patch and infantile ileocecal intussusception. *Ann Pediatr Surg* 1:7, 1984.

Physicians' Office Laboratories

KATHLEEN L. VOLDISH, CLA (ASCP)

The number of physicians' office laboratories (POLs) is increasing. Formal technical education and certification for physician office laboratory personnel assure more accurate results.

INSTRUMENT SELECTION

Question: With all the new instruments available for physicians' offices, how does a physician or his staff know what instrument is right for the laboratory?

Answer: When evaluating instrumentation, two aspects must be considered. Initially, the technical feasibility must be considered. Economic feasibility, however, also must be weighed carefully before a new instrument is purchased.

Requests to consider a new procedure come from many sources, including physicians, administrators, sales representatives, or laboratory staff. From a technical aspect, many questions must be addressed. For a specific test you should first consider the time needed to perform the procedure. In other words, will the results be available for diagnostic value for the physician? Second, consider whether the test requires special specimen collection or patient preparation. Mechanically, would the new procedure need special space, complicated safety features, alterations in plumbing, and/or additional electrical outlets? Is your current laboratory structure capable of such modification? You also should consider that after purchasing, will the required reagents be readily accessible and do they have special storage requirements? From a technical aspect, however, just how valuable is the test for the laboratory's diagnostic requirements overall? For example, if you are considering adding theophylline determinations to your procedures, but the physician's caseload for asthmatics or related diseases is low, the technical capability may be "overkill." Each laboratory, of course, is different.

Economic feasibility, in many cases, will override technical aspects in management decisions. Most suppliers can help get you started in evaluating the instrument's economic feasibility by performing a cost analysis for your review. Many times, however, this does not reveal parameters critical for your laboratory environment. Because of the many economic variables involved in matching a specific instrument to a given laboratory, calculations based on your workload should be done. Such variables to consider are personnel (salaries and benefits), supplies, equipment, space, service, and overhead. One way that is useful is to determine the estimated number

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of tests to be performed on the instrument. Multiply this number by the monthly consumable items (needles, drawing tubes, cuvettes, or pipettes) needed for the test. Be sure to establish the monthly number of quality control samples and calibrations required. From this point, calculate the monthly reagent or kit costs based on the volume of patients, quality control, and calibrations. Check the CAP workload units per test and the hourly wages of the laboratory personnel, and, with simple arithmetic, the estimated direct monthly operation costs can be calculated. Although equipment costs can be allocated on a five- to ten-year depreciation scale, do not forget to add maintenance contract fees. The bottom line is whether the laboratory's workload merits the economic capitalization and maintenance of a given instrument, especially after allocation of overhead expenses are assigned. These overhead expenses are those that accrue in areas not directly identifiable to a specific function and must be allocated on the basis of either test volume or revenue. Some of these expenses include building rent, operations, maintenance, administration, bad debt, liability, and education.

SAFETY TRAINING IN THE LABORATORY

Question: Our physician office laboratory has been receiving safety data sheets from chemical manufacturers when we place orders. In addition, I have heard about OSHA requiring laboratories to do special training. What is our responsibility as a physician office laboratory (POL)?

Answer: As of August 1, 1988, all laboratories, regardless of size, are required by the Occupational Safety and Health Administration (OSHA) to have a written Hazardous Communication Program in place if hazardous chemicals are housed in the facility and handled by employees.

An inventory of all hazardous chemicals should include the chemical's name, location, quantity stored per month, physical state (solid, liquid, or gas), the chemical's hazard classification, the manufacturer's name and address, and any pertinent additional information.

Once the inventory is complete, a letter to each manufacturer of every potentially hazardous chemical in the laboratory should be sent to obtain a Materials Safety Data Sheet (MSDS). The original MSDS must be retained in the laboratory along with the inventory list; both should be updated annually.

The next step is to plan a Hazard Communication Standard (HCS) educational program and retain a written copy of the program in the workplace. Training can be done on each specific chemical, e.g. picric acid, or categories of hazards, e.g. solvents. The law specifically requires each program to include behavioral objectives covering the following items: location of hazardous chemicals in the workplace; location of the HCS written program, chemical inventory, and MSDS; environmental monitoring, if appropriate; physical and health hazards of the chemicals in the workplace; employee protection measures including work practices, emergency procedures, and protective equipment; and program details including the laboratory system and MSDS as well as how to use these systems.

All employees are to be trained within 30 days of employment and always before being assigned to work with a hazardous chemical. When a new hazard is introduced into the workplace, additional training should be conducted by the employee's immediate supervisor. The HCS program must be a regular, continuing effort with review sessions held annually. Documentation of the training must be in written records permanently retained by the POL.

Each POL employee should have a full understanding of the MSDS forms. The ingredient section of the MSDS lists the ingredients of the chemical and sets forth the permissible eight-hour occupational exposure—the threshold limit value. The physical data section explains the physical and chemical characteristics including boiling point, specific gravity, solubility, appearance, and odor. The fire and explosive hazard data section identifies any special precautions that should be taken during fire fighting. The health-hazard data section provides information about tolerable exposure levels, carcinogenicity, how the chemical enters the human system, and first-aid procedures. In addition, each employee should receive a list that identifies which chemicals affect specific organs, along with signs and symptoms of poisoning.[4]

The MSDS form also provides reactivity data (how and under what conditions chemicals react), environmental protection procedures (handling methods, what to do if spills occur, and how to dispose of products), and other precautions (eye, skin, and respiratory protection, special ventilation, and how to handle contaminated equipment).[5]

Even if employees handle only sealed containers, as in the receiving area, possible leakage and breakage present serious risks. These employees who are exposed to hazardous chemicals need to be informed of proper protection and emergency procedures and should be included in the hazard communication program.

OSHA has started inspecting laboratories to see that personnel have received formal education and training about hazardous chemicals. Careful compliance with the Hazard Communication Standard will ensure OSHA approval and safe laboratory practice. ■

Focal *Candida* Hepatitis

in a Patient with Richter's Syndrome

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This may be the first case of Richter's syndrome (Hodgkin's lymphoma or histiocytic lymphoma occurring with chronic lymphocytic leukemia) complicated by focal Candida *hepatitis.*

Reticulum cell sarcoma occurring in a patient with chronic lymphocytic leukemia (CLL) first was reported by Richter in 1928.[2] Since that time, Hodgkin's lymphoma also has been observed in patients with CLL.[3] The term Richter's syndrome (RS) has been applied to both associations. We present a case of RS complicated by focal *Candida* hepatitis. We discuss the problems associated with the diagnosis and treatment of focal *Candida* hepatitis in a patient with RS and we review the literature.

CASE REPORT

A 52-year-old female had a ten-year history of asymptomatic stage 0 CLL (Table 1). One month before admission, she developed enlarged cervical lymph nodes and was treated with the alkylating agent chlorambucil (Leukeran®) for suspected progression to stage I CLL. Adenopathy decreased with treatment, but the patient required admission to St. Francis Medical Center, Trenton, because of progressive weakness, weight loss, and new onset of right upper quadrant abdominal pain. Physical examination revealed massive ascites and hepatomegaly. Serum bilirubin was 148 μmol/L (normal range: 2-18 μmol/L), alkaline phosphatase was 786 μ/L (normal range: 30-115 μ/L), lactate dehydrogenase was 2,284 μ/L (normal range: 100-225 μ/L), and aspartate aminotransferase was 225 μ/L (normal range: 7-40 μ/L). Hepatitis B surface antibody and antigen were negative. Ultrasound of the biliary system was normal. Abdominal computerized tomography (CT) showed multiple space-occupying hepatic defects (Figure 1).

Thin-needle aspiration liver biopsy was done under CT control. Aspirated material contained a diffuse mixed small and large cell type malignant lymphoma (Table 2). One day after the biopsy, our patient developed symptoms of an acute abdomen and was taken as an emergency to the operating room. At laparotomy, surgeons found a diffuse malignant gastric lymphoma, mixed small and large cell type. There were two areas of gastric perforation caused by extensive lymphomatous involvement with necrosis. Two perigastric lymph nodes were involved by CLL alone. A partial gastrectomy was performed. The liver was enlarged but was without discrete nodules. Wedge biopsy of the liver demonstrated necrosis and the same malignant lymphoma. In addition, invasive pseudohyphae of *Candida*

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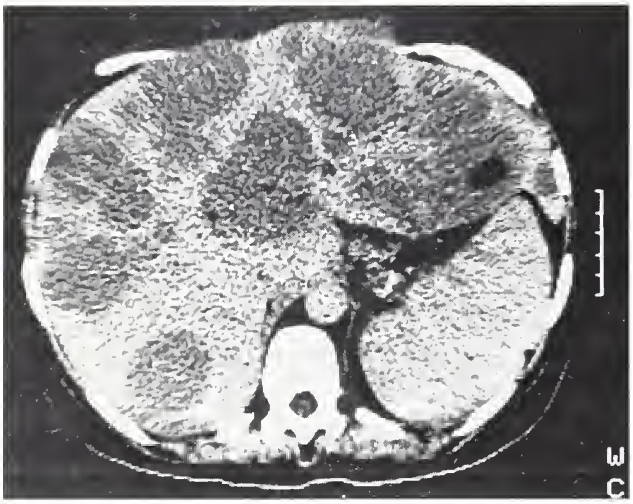

Figure 1. Computed tomography scan demonstrating multiple space-occupying hepatic lesions. Differentiation between lymphomatous and fungal involvement is not possible.

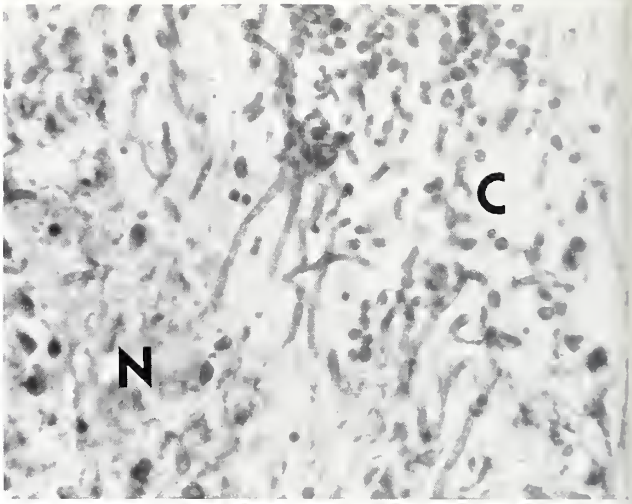

Figure 2. Wedge liver biopsy demonstrating necrosis and both budding yeast and invasive pseudohyphae of *Candida* (periodic acid-Schiff stain, 480x).

albicans were seen penetrating the liver biopsy specimen (Figure 2).

Intraoperative peritoneal cultures grew *Candida albicans*. Multiple blood, urine, sputum, and central venous catheter tip cultures and stains were negative for fungus. Amphotericin B was started on the first postoperative day; however, the patient died ten days after surgery from multisystem organ failure.

Table 1. ***RAI clinical staging for CLL.****

Stage 0: Lymphocytosis alone.
Stage I: Enlarged nodes.
Stage II: Splenomegaly, hepatomegaly, or both.
Stage III: Anemia (HgB less than 11 g/dL).
Stage IV: Thrombocytopenia (platelets less than 100,000).

*Rai KR, Sawitsky A, Cronkite EP: Clinical staging of chronic lymphocytic leukemia. *Blood* 46:219, 1975.

Table 2. ***International working formulation.****

Low-Grade Lymphoma
Small lymphocytic cell
Follicular, mixed cleaved cell
Follicular, mixed small cleaved and large cell

Intermediate Grade Lymphoma
Follicular, large cell
Diffuse, small cleaved cell
Diffuse, mixed small cleaved cell
Diffuse, large cell

High-Grade Lymphoma
Large-cell immunoblastic
Lymphoblastic cell
Small noncleaved cell

*Non-Hodgkin's lymphoma pathological class project. NCI-sponsored study of classification of non-Hodgkin's lymphoma: Survey and description of a working formulation for clinical usage. *Cancer* 49:2112, 1982.

DISCUSSION

RS is a rare event occurring in less than 10 percent of patients with CLL.[3] There is no definitive conclusion regarding the histological characterization of the malignancies in RS. Immunological studies of tumor cells have shown some reticulum cell sarcomas and Hodgkin's lymphomas associated with RS originate from lymphoid B-cells.[1] Therefore, it has been suggested that histiocytic lymphomas in RS represent a B-monoclonal immunoblastic lymphoma that arise from the initial B-cell neoplasm.[3] Immunochemistry techniques using monoclonal and polyclonal antibodies identified both B-lymphocytic and monocytic-histiocytic cell lines of differentiation.[5] Leukemic transformation of a multipotential stem cell could explain the simultaneous occurrence of two distinct cell populations; however, morphological and immunological evidence indicates the possibility of developing two independent malignancies is unusual.[6,7] It is possible that chemotherapy for the initial leukemia could promote the development of a second malignancy, but this is unlikely considering the usually short time from administration of chemotherapy to emergence of the second malignancy.[5]

The clinician should suspect RS if a patient with CLL develops systemic symptoms such as weight loss and weakness associated with local or diffuse lymph node enlargement unresponsive to standard treatment protocols for CLL (chlorambucil and radiotherapy). Diagnosis of RS most often is established by lymph node biopsy that demonstrates the development of a malignant lymphoma in a patient who previously had CLL. Lymph nodes may contain both leukemic and lymphoma cells that may represent an early stage of RS.[4] This may explain why our patient's cervical nodes decreased in size after chlorambucil treatment. It is possible that the alkylator effectively treated the leukemic portion of the node thus decreasing the node mass. It is likely, however, that the lymphoma was not affected.

The prognosis for patients with RS is poor. The results of chemotherapeutic regimens incorporating cyclophosphamide, Adriamycin™, Vincristine®, and prednisone have been disappointing.[3,5] Remission has been reported, but median survival time is about four months.[4,5] Multisystem organ failure caused by dissemination of the lymphoma is the usual cause of death.

Patients with RS and other critical illnesses are at risk for developing fungal infection.[8,9] Potential risk factors that contribute to fungemia in these patients include malignancy, the use of chemotherapy, corticosteroids, and broad-spectrum antibiotics.[8,9] By altering the normal flora of the gastrointestinal tract, overgrowth of fungus can occur and cause gastric mucosal injury and permit translocation of the fungus into the bloodstream.[10] Reports of focal *Candida* infection in the liver with negative systemic cultures suggest that the portal vein is the initial passageway for *Candida* from the gastrointestinal tract to the blood.[11,12] In our case, focal liver candidiasis and negative systemic cultures for fungus support this mechanism of infection.

Clinically, focal *Candida* hepatitis presents with fever, right upper quadrant abdominal pain, and elevated liver enzymes.[11,12] The most consistent biochemical abnormality is an extreme elevation of the alkaline phosphatase level.[9] All systemic fungal cultures are negative. The CT scan helps to establish the diagnosis; however, in patients with RS, CT differentiation between lymphomatous and fungal hepatic involvement is not possible. Also, percutaneous liver biopsy can be misleading due to sampling error. In our patient, a liver biopsy done at the time of laparotomy was the only diagnostic test sensitive enough to establish the diagnosis.

Patients with focal *Candida* hepatitis require prompt treatment with intravenous amphotericin B since the liver may act as a filter, delaying systemic fungal infection.[9] This function of the liver may provide the clinician with a window of time to treat the hepatic infection before systemic infection occurs.[7] Even with early treatment, the prognosis is poor: 34 percent mortality.[3] Liposomal-encapsulated amphotericin B enhances drug actions and may be an effective and less toxic alternative treatment.[13,14]

CONCLUSION

The development of fever, right upper quadrant abdominal pain, elevated liver enzymes, and CT scan showing evidence of focal hepatic degeneration in immunocompromised patients should raise the suspicion of *Candida* hepatitis. Open liver biopsy may be necessary to establish the diagnosis. Strong consideration should be given to empiric amphotericin B therapy while awaiting culture and biopsy results to prevent potential fungal dissemination.[8]

Editor's note. It will be interesting to find out whether the newly released fluonazole will do a better job than amphotericin B. ■

REFERENCES

1. Aisenberg AL, Long JC: Lymphocyte surface characteristics in malignant lymphoma. *Am J Med* 58:300-306, 1975.
2. Richter MN: Generalized reticular cell sarcoma of lymph nodes associated with lymphocytic leukemia. *Am J Pathol* 4:285-299, 1928.
3. Trump DL, Mann RB, Phelps R, et al.: Richter's syndrome: Diffuse histiocytic lymphoma in patients with chronic lymphocytic leukemia. A report of five cases and review of the literature. *Am J Med* 68:539-548, 1980.
4. Harousseau JL, Flandrin G, Tricot G, et al.: Malignant lymphoma supervening in chronic lymphocytic leukemia and related disorders. *Cancer* 48:1302-1308, 1981.
5. Neame PB, Soamboonsrup P, Browman G, et al.: Simultaneous or sequential expression of lymphoid and myeloid phenotypes in acute leukemia. *Blood* 65:142-148, 1985.
6. Perentesis J, Ramsey NKC, Brunning R: Biphenotypic leukemia: Immunological and morphological evidence for a common lymphoid-myeloid progenitor in humans. *J Pediatr* 102:63, 1983.
7. Hershfeld MS, Kurtzberg J, Harden E, et al.: Conversion of stem cell leukemia from a T-lymphoid to a myeloid phenotype reduced by the adenosine deaminase inhibitor 2' deoxycoformycin. *Proc Natl Acad Sci* 81:253, 1984.
8. Alden SM, Frank E, Flancbaum L: Abdominal candidiasis in surgical patients. *Am Surg* 55:45-49, 1989.
9. Haron E, Fled R, Tuffnel P, et al.: Hepatic candidiasis: An increasing problem in immunocompromised patients. *Am J Med* 83:17-26, 1987.
10. Solomkin JS, Flohr AB, Quie PG, Simmons RL: The role of *Candida* in intraperitoneal infections. *Surgery* 88:524-530, 1980.
11. Maksymiuk AW, Thongprasert S, Hopfer R, et al.: Systemic candidiasis in cancer patients. *Am J Med* 77:20-27, 1984.
12. Lewis JH, Patel HR, Zimmerman HJ: The spectrum of hepatic candidiasis. *Hepatology* 2:479-487, 1982.
13. Bartley DL, Huges WT, Parvey LS, et al.: Computed tomography of hepatic and splenic abcesses in leukemic children. *Pediatr Infect Dis* 1:317-321, 1982.
14. Lopez-Berestein G, Hopfer RL, Mills K, et al.: Liposomal amphotericin B is toxic to fungal cells but not to mammalian cells. *Biochem Biophys Acta* 770:230-234, 1984.

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References
1. *USP DI Update, September/October 1988, p 120.*
2. *Br J Clin Pharmacol 1985;20:710-713.*
3. *Data on file, Lilly Research Laboratories.*
4. *Scand J Gastroenterol 1987;22(suppl 136):61-70.*
5. *Am J Gastroenterol 1989;84:769-774.*

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Carcinogenesis, Mutagenesis, Impairment of Fertility—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events was due to the drug.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to three times the upper limit of normal, however, did not significantly differ from that in placebo patients. Hepatitis and jaundice have been reported. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H_2-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H_2-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Because cross-sensitivity among this class has been observed, H_2-receptor antagonists should not be administered to those with a history of hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

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Familial Polyposis Coli & Gardner's Syndrome

W. MARK NANNERY, MD
JOSEPH G. BARONE, MD
CLAUDE ABOUCHEDID, MD

Familial polyposis coli and Gardner's syndrome are genetically inherited defects causing multiple adenomatous polyps of the colon with a propensity for malignant degeneration. To emphasize that neoplasm of the ampulla of Vater is the most frequently reported extracolonic gastrointestinal neoplasm, we present a case report and a review of the literature.

Familial polyposis coli (FPC) was first described in 1859 as a condition associated with multiple adenomatous polyps present throughout the large intestine. The polyps may number from a few hundred to thousands lining the colon. The disease is transmitted as an autosomal dominant genetic defect, occurring in approximately 1 in 8,300 live births.[1]

Gardner and Richards first described the triad of colonic polyposis, benign osteomas of the skull and mandible, and soft tissue tumors such as epidermoid cysts in 1953. After the investigation of seven family members, the triad now known as Gardner's syndrome (GS), like FPC, appeared to be inherited as an autosomal dominant genetic defect.[2] Other abnormalities such as dental anomalies and desmoid tumors have been reported and now are accepted as additional manifestations of GS.

More recently, it has been recognized that most patients with FPC or GS will manifest an even wider spectrum of extracolonic gastrointestinal tract (GIT) involvement. The distinction between FPC and GS has been subject to debate: it has been suggested that they represent the same single gene mutation with variable penetrance or expression, accounting

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for the differences between the two entities, and possibly for the wide spectrum of extracolonic GIT manifestations seen in both.[3]

Regardless of the variety of their manifestations, it is clinically important to recognize FPC or GS because of the greater than 95 percent incidence of carcinoma of the colon in untreated individuals. In untreated patients, the average age for appearance of adenomas is 24.5 years, and the average age for the diagnosis of colon cancer is 39.2 years.[4]

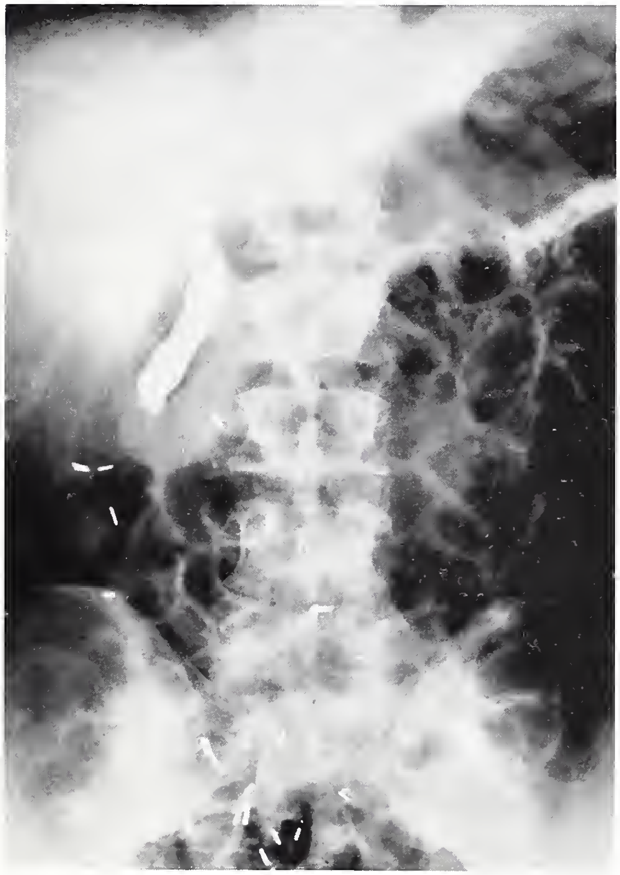

Figure 1. ERCP showing obstruction of the distal common bile duct.

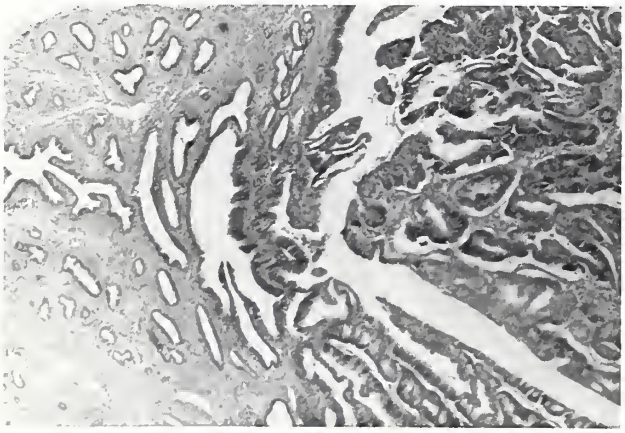

Figure 2. Histologic specimen of periampullary region. Normal common bile duct is to the left. To the right, is invasion of the distal duct by a well-differentiated periampullary carcinoma.

For many years, it was accepted that adenomas in FPC or GS were limited to the colon and that total colectomy was curative. However, recent recognition of benign and malignant neoplasms of the upper GIT has created the need for a more extensive workup of newly diagnosed FPC or GS patients and a closer followup throughout their lives. Colectomy now is considered the initial step in the long-term management of these patients.

Recognized extracolonic GIT manifestations have included neoplasms of the stomach, duodenum, ampulla of Vater, pancreaticobiliary tree, and small intestine; periampullary location most frequently is encountered.

CASE REPORT

The patient is a 49-year-old male belonging to a pedigree with known GS. At 26 years of age, he was found to have multiple colonic polyps as well as benign osteomas of the skull. In 1970, a total colectomy and proctectomy was performed at 32 years of age, with evidence of invasive carcinoma in one of the polyps.

The patient was readmitted in November 1987 with partial intestinal obstruction secondary to ileostomy stenosis, weight loss of eight pounds over two months, and a history of persistent itching of a few weeks' duration that prompted specific biliary tree studies.

Admission laboratory studies included white blood cell count of 9.4 x 10^3 cells/ml^3; hemoglobin of 15.6 g/dL; and hematocrit of 46.2 percent. Abnormal values included amylase of 285 U/L, and alkaline phosphatase of 785 U/L. All other laboratory values were within normal limits. Ultrasound and computed tomography (CT) scan of the gallbladder, liver, and pancreas were normal. Endoscopic retrograde cholangiopancreatography (ERCP) with biopsy was performed revealing an obstructing tubulovillous adenoma with atypia involving the ampulla of Vater (Figure 1).

Three weeks later, a Whipple procedure (pancreaticoduodenectomy) was performed as definitive treatment for a large periampullary carcinoma. Histological examination revealed a primary, well-differentiated papillary adenocarcinoma arising in a mixed tubulovillous adenoma involving the ampullary region with invasion of the distal common bile duct (Figure 2). All lymph nodes were negative for carcinoma. The postoperative course was slow but uneventful. When last seen in May 1989, the patient presented no evidence of recurrence and had normal bilirubin and liver enzyme values.

DISCUSSION

Abdominal colectomy with ileoproctostomy had been the accepted initial treatment for FPC or GS since the report of McKenney in 1939.[5] However, a long-term study by Moertel found that cancer of the rectal stump developed in 59 percent of patients followed for 23 years after surgery.[6] The median interval from ileoproctostomy to cancer is 14 years.[7]

This study prompted reconsideration of surgical treatment with total proctocolectomy and either a standard or a continent ileostomy as an accepted alternative. More recently, in an effort to maintain acceptable anal sphincter control and continence, ileoanal endorectal pull-through procedures were developed with maintenance of nervous innervation to the rectal musculature and genitalia.

At the time of diagnosis of FPC or GS, upper GIT endoscopy, and duodenoscopy should be performed. After colectomy, periodic endoscopic examination of the upper and lower GIT should be considered in all patients at an interval of every one to three years. Early detection and coagulation or excision of potentially premalignant lesions may prevent malignant transformation, thereby improving the prognosis of these patients.

Neoplasms at the ampulla of Vater are the most frequently reported extracolonic GIT pathology, originally estimated as occurring in 2 to 15 percent of patients.[8] However, in a series of 17 patients with GS, Shemesh discovered adenomas at one or more sites in the upper GIT in all patients, most frequently at the ampulla of Vater (64.7 percent of patients).[9] Adenomas also were seen in the duodenum (47 percent), stomach (29.4 percent), and small intestine (23.57 percent).

Similar prospective studies from Japan on 24 FPC patients also revealed a high incidence (50 percent) of periampullary adenomas, and a total upper GIT incidence of 70 percent.[10]

It is probable that extracolonic GIT neoplasms increase in size and number during life, and most patients may be expected to develop them during followup. Adenomas of the ampulla of Vater show a greater tendency for dysplasia than those of the stomach or small bowel, resulting in a more frequent occurrence of malignancy at that site.

The mean time for development of periampullary carcinoma has been estimated at 15.7 years after the diagnosis of FPC or GS; the average age of patients when this diagnosis is made is 48 years.[11]

During endoscopic followup, a high prevalence of small tubular adenomas is expected. Biopsy specimens of all polyps at the ampulla should be obtained. Villous adenomas and larger tubular adenomas should be removed because of their malignant potential. Endoscopic polypectomy may be considered if the polyp is pedunculated, separate from the ampulla, and safely and adequately resectable. Large villous polyps and symptomatic, large tubular adenomas require open surgical excision.

Preoperative ERCP is helpful in determining the extent of ductal involvement, but caution must be exercised in interpretation of the results of endoscopic biopsy, as it is not always possible to obtain representative specimens. Whipple's procedure should be considered if invasive carcinoma is evident or strongly suspected.

SUMMARY

FPC and GS are genetic disorders treated initially by total colectomy. As more has been learned about these entities, it has become apparent that lifetime followup of affected patients now is necessary.

The wide spectrum of extracolonic GIT manifestation has made periodic endoscopy necessary following total colectomy. Early detection and coagulation or excision of potentially premalignant neoplasms may prevent malignant degeneration and improve the long-term survival of these patients.

This case presentation and review stress the importance of periodic specific examination of the ampulla of Vater, and the application of appropriate ablative therapy. ■

REFERENCES

1. Sleisenger MH, Fordtran JS: *Gastrointestinal Diseases; Pathophysiology, Diagnosis, and Management.* 2nd Edition. Philadelphia, PA, W.B. Saunders Co., 1978.
2. Shemesh E, Bat L: A prospective evaluation of the upper gastrointestinal tract and periampullary region in patients with Gardner's syndrome. *Am J Gastroent* 80:825, 1985.
3. Ewald R: Gardner's syndrome with adenoma of the common bile duct. *Acta Chir Scand Suppl* 520:63, 1984.
4. Bussey HJ: *Familial Polyposis Coli.* Baltimore, MD, Johns Hopkins University Press, 1975.
5. McKenney DC: Multiple polyposis; congenital, heredofamilial malignant. *Am J Surg* 46:204, 1939.
6. Moertel C, Hill J, Adson M: Surgical management of multiple polyposis. *Arch Surg* 100:521, 1970.
7. Watne A, Carrier J, et al.: The occurrence of carcinoma of the rectum following ileoproctostomy for familial polyposis. *Ann Surg* 83:550, 1977.
8. Pauli RM, Pauli ME, Hull JG: Gardner's syndrome and periampullary malignancy. *Am J Med Gent* 6:205, 1980.
9. Shemesh E, Pines A, Bat L: Spectrum of extracolonic gastrointestinal tract involvement in Gardner's syndrome. *Isr J Med Sci* 21:973, 1985.
10. Sugihara K, Muto T, Kamiya J, et al.: Gardner's syndrome associated with periampullary carcinoma, duodenal and gastric adenomatosis. *Dis Colon Rectum* 25:766, 1982.
11. Berk T, Friedman L, Goldstein S, et al.: Relapsing acute pancreatitis as the presenting manifestation of an ampullary neoplasm in a patient with familial polyposis coli. *Am J Gastroent* 80:627, 1985.

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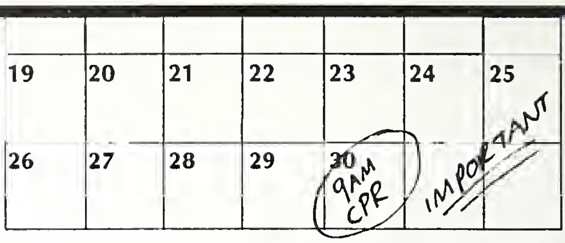

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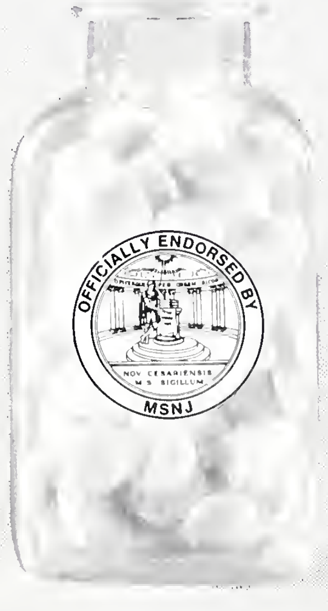

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NOTEBOOK

TRUSTEES' MINUTES

A regular meeting of the Board of Trustees was held on July 15, 1990, at the executive offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society. A summary of significant actions follows:

President's Report . . .
(1) PRO versus MSNJ . . . Noted that MSNJ prevailed in this litigation; physicians may be represented by an attorney if cited by PRO on a quality issue.
(2) MIIENJ President . . . Heard that Mr. Daniel Goldberg will assume the position of president of the Medical Inter-Insurance Exchange of New Jersey.
(3) National Practitioner Data Bank . . . Noted that the Data Bank will be operational in the fall with files on all adverse records of insurance carriers, licensing boards, and medical societies.
(4) Appointment of AMA Delegate . . . Unanimously approved the appointment of Dr. Harry M. Carnes as AMA delegate and Dr. Douglas M. Costabile as AMA alternate delegate. Also, approved the following:

That the Board not endorse candidates for AMA elective offices (excluding candidates for the AMA Hospital Medical Staff Section Governing Council) during the next 12-month period.

(5) AMA Outreach Program . . . Announced new member recruitment reached an all-time high.
(6) Meeting with HCFA and Pennsylvania Blue Shield . . . Noted that all resolutions from the 1990 House of Delegates must be executed.

Executive Director Report . . .
(1) MSNJ Paid Membership . . . Noted that membership as of June 30, 1990, totalled 9,395 with 7,149 regular dues-paying members; a complete report on all membership categories will be available on a regular basis for those interested.
(2) MSNJ Financial Statements . . . Reviewed and approved the financial statements for the period ending April 30, 1990.
(3) Litigation . . . Reviewed the following items: no-fault: filed suit concerning the $100 license assessment issue and a ban on balance billing; malpractice surcharge: will be tried in the appellate division in September; physical therapy regulations: decision was reversed, upholding the physical therapy regulations; office of the ombudsman: legal firm of Kern, Augustine, Conroy & Isele will proceed with legal action against regulations; medical waste registration/refunds: processed reimbursements for responding physicians and other 40 percent need to respond to the DEP mailing; physician assistants: legal arguments will be presented by Judge Herbert J. Stern; and optometric drug bill: not sufficient support in the Democratic Caucus to bring the bill to a vote.
(4) MSNJ Annual Meeting . . . Agreed to be prepared to recommend an alternative site for the 1991 meeting if MSNJ does not succeed in reaching mutually agreeable terms with the Taj Mahal Casino Resort.

Specialty Reports . . . Received informational reports from UMDNJ, the Academy of Medicine of New Jersey, and the New Jersey Hospital Association.

Committee on Environmental Health . . . Approved the following recommendation:

That the Board of Trustees advise DEP that the Society urges adoption of the following: That a more comprehensive waste program be formulated, including a reduction of materials through composting and other forms of segregation and recycling; that the necessity of recycling be reduced by lowering the amounts of available packaging and other disposable materials by regulations and/or incentives; that the use of composting be maximized to reduce the volume of material that must be otherwise disposed of.

Letters were sent to the DEP commissioner stating MSNJ believes in a waste management program emphasizing reduction of materials, recycling, and composting, and offering assistance with concerns about the disposal of low-level radioactive waste materials.

AMA Annual Meeting . . . Noted the following from Dr. Karl T. Franzoni's report: Dr. Palma Formica's election to a three-year term on the AMA Board of Trustees, Dr. Robert J. Weierman's election to a two-year term as secretary of the AMA-HMSS governing Council, and Dr. James S. Todd's selection as AMA executive vice-president; a report on the status of Health Access America; status of New Jersey resolutions including: adoption of a substitute resolution on Medicare billing requirement incorporating New Jersey's resolution; interim meeting location would remain in

Chicago with the possibility of another type of AMA meeting in Washington, DC; resolution requesting Congress to require Part B carriers to provide guidelines in understandable language that clearly identify noncovered services and medically unnecessary services and asking Congress to establish an appeals process for physicians and patients to be initiated in a timely fashion before a determiniation that a service is noncovered or medically unnecessary were placed on the consent calendar and adopted; reaffirmed AMA policy concerning gender exploitation in the workplace; the first portion of Resolution #15 (tax deductions for uncompensated care) was refered to the AMA delegation and noted that AMA policy does not support a special income tax deduction for providing medical care to the indigent; and referred the resolution concerning national health insurance to the AMA delegation for report back to the Board; and the AMA Board reiterated its opposition to socialized or national health care in response to MSNJ's Resolution #16 (no to national health insurance).

MIIENJ Legislative Committee Report . . . Received a report from Robert A. Mauerer, DO, dealing with two actions: the first directed the legislative committee proceed with its plan for passage of structured verdict legislation during the current session of the Legislature; and directed the Committee to proceed with its plan to achieve modification of court rules in the areas of prejudgment interest, arbitration, and bifurcation of these issues.

New Business . . . Noted the following items: Dr. Frank J. Malta will investigate the delay in issuing CDS renewal certificates; vote of support for DO representation for SBME; and authorization for president to appoint four MSNJ members to serve on the newly created Medicare Physicians Advisory Council. ☐

MSNJ AUXILIARY

Addressing the needs of juveniles and seniors has been the focus of recent health projects in Passaic and Gloucester counties. MSNJA applauds both auxiliaries for recognizing a community problem and successfully developing a program to solve it.

In Paterson, Passaic County, 20 percent of the children belong to single-parent families and many others have two working parents. A large number of elementary school children care for themselves after school and older children frequently are given responsibility for their younger brothers and sisters—all too often with tragic results. Area medical centers routinely treat young children injured in the absence of parents. Nationwide, close to three million children under the age of five require medical care due to accidents in the home. Such statistics prompted the Passaic County Medical Society Auxiliary and the Northern New Jersey Health Planning Council to devise and cosponsor a babysitting training program to educate low-income children between the ages of 9 and 13 to be good emergency mother substitutes for their younger siblings. The aim of the program was to protect the safety of young children six months old to eight years old by teaching their babysitters the latest medical information on safe child care—how to prevent injuries and what to do in the event of an emergency.

The joint efforts of the Auxiliary and the Council resulted in a four-part program held on Monday afternoons in April at the Paterson Public Library. In attendance were 35 students from Paterson Schools 6 and 21. The sessions dealt with common sense in caring for children. Volunteers—a physician, nurses, teachers, a Consumer Products Safety Commission representative, an American Red Cross worker, and auxiliary members—taught the children basic child care information; the stages of child development; safe games and toys for toddlers; first aid and choking rescue techniques; fire prevention; promotion of language and early learning; and specific practical advice on the prevention of accidents. Encouraged by the results of the Paterson project, the organizers are hoping to expand the program to other cities.

Targeting the elderly population, the Gloucester County Medical Society Auxiliary developed a two-part geriatric health project—"Staying Active After Sixty" and "Adopt-A-Nursing Home." The goal of "Staying Active After Sixty" was to challenge our attitudes toward aging by offering senior citizen groups and nursing homes an excellent inspirational film that emphasizes it

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is never too late to improve fitness through good nutrition, exercise, and the reduction of stress. To accompany the film, the Auxiliary's health education committee devised two separate discussion guides—one designed for groups of older persons, and one for their caretakers. In addition, pretests and post-tests are available to determine if and how attitudes have changed after viewing the film. Because this is not a time-limited project, groups in the community will be able to utilize and benefit from the program for years to come. The second project involves "adopting" the Shady Lane Nursing Home in Clarksboro. The Auxiliary has made an ongoing commitment to provide artwork and wall decorations, to brighten the milieu in this county facility. Several times a year, they also will donate fresh-cut flowers that residents can arrange and use in activity projects. Finally, the Auxiliary hopes to procure a fine quality piano so that various entertainment groups can make special appearances at the home. □ Marion H. Geib

AMNJ REPORT

The Academy of Medicine's Annual Awards Dinner, held on May 30, 1990, at the Chanticler in Short Hills, was a success. Approximately 350 guests attended to honor our award recipients and to help install our officers for the 1990-1991 year. Our Edward J. Ill Award recipient, Dr. Leighton Cluff, and our Citizen's Award designee, Arline Schwartzman, both were eloquent in their responses. A special touch to the evening was the invocation delivered by the Reverend Claudia Kalis, Dr. Cluff's daughter.

The location for our 1991 event again will be the Chanticler and the date will be May 29, 1991. The Awards Committee, under the chairmanship of immediate past-president, Dr. Frederick Cohen, is soliciting nominations for 1991. The deadline for receiving nominations is September 17, 1990.

New AMNJ officers for 1990-1991 elected at the Awards Dinner were President, Stanley S. Bresticker, MD; President-Elect, Gerald Shapiro, MD; First Vice-President, George J. Hill, MD; Second Vice-President, John L. Krause, MD; Secretary, Palma Formica, MD; and Treasurer, Alan Herschman, MD.

The Academy's staff actively is preparing the *Annual Calendar for 1990-1991*. The *Calendar* will include many items of interest including CME activities for the upcoming academic year, a list of available roving symposia topics, an application to participate in our Speaker's Bureau, and a list of affiliated specialty societies and their presidents.

On Saturday, October 20, 1990, the Academy of Medicine will sponsor a major symposium on magnetic resonance imaging at the Hyatt Regency Hotel in New Brunswick. The Radiological Society of New Jersey will cosponsor this event and Dr. Michael Kessler is the program chairman. Among the guest presentors will be Dr. Robert Grossman from the Hospital of the University of Pennsylvania who will discuss MRI of the brain and Dr. Jeffrey Weinreb of the New York University Medical Center who will discuss MRI of the abdomen and pelvis. Locally, Dr. Reuben Mezrich, director of MRI at the Robert Wood Johnson University Hospital will discuss the latest applications of MRI.

The Academy will continue our special series on socioeconomic, political, and ethical issues. The series, formally known as the "First Wednesday" series, will be entering its eighth year. On Tuesday, September 25, 1990, an evening program on living wills will be held in cosponsorship with the Bergen County Medical Society and the Citizen's Committee on Biomedical Ethics. Panelists will include Senator Gabe Ambrosio and Dr. Michael Nevins. On Wednesday, November 7, 1990, New Jersey State Department of Health Commissioner Dr. Frances Dunston will address a luncheon meeting at our headquarters in Lawrenceville. Dr. Dunston will discuss issues that are impacting on the health department. □ Stanley Bresticker, MD, President

PLACEMENT FILE

The following physicians have written to the executive offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information has been supplied by the physicians. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

INTERNAL MEDICINE

Anan Adnan Faidi, MD, 30 Charles St. W, Apt. 1717, Toronto, Ontario, IM4Y 1R5 Canada. Jordan 1983. Board certified. Also, board eligible (ENDOCRIN). Group. Available.

Suresh Reddy, MD, 3301 Cobblestone Cir., #6, Waterloo, IA 50703. Kakatiya (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

NUCLEAR MEDICINE

Haresh P. Solanki, MD, 3 West Elm St., Islip, NY 11751. MP Shah Medical College (Iran) 1980. Board eligible. Group or hospital-based. Available.

PHYSICAL MEDICINE AND REHABILITATION

Robert B. Thorne, MD, 112 Woodside Ave., Trenton, NJ 08618. Rutgers 1980. Board certified. Part time or full time. Available.

SURGERY

Donna Vecchione, MD, 27700 Bishop Park Dr., 4025, Willoughby Hills, OH 44092. SUNY-Stony Brook 1985. Board eligible. Partnership, solo, multispecialty group. Available.

UROLOGY

Ronald G. Frank, MD, 380 Rector Pl., Apt. 11J, New York, NY 10280. New York Medical 1985. Group or partnership. Available July 1991.

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CONTINUING EDUCATION

ALLERGY

October

19 **General Allergy**
1-2 P.M.—North Princeton Developmental Center, Princeton
(AMNJ)

25- **In Vitro Allergy Seminar**
28 Myrtle Beach, Martinique
(Holy Name Hospital)

ANESTHESIOLOGY

November

20 **Meeting**
6-9 P.M.—Ramada Inn, Clark
(New Jersey State Society of Anesthesiologists)

CARDIOLOGY

October

10 **Early Intervention in Cardiac Problems**
12:30-5 P.M.—Bristol-Myers-Squibb Corp., Lawrenceville
(Mercer Medical Center and AMNJ)

23 **Sudden Cardiac Death**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

27- **Cardiac Surgery: 1991**
28 8 A.M.-5 P.M.—Bally's Park Place Hotel & Casino, Atlantic City
(Cooper Hospital/University Medical Center)

November

20 **Current Strategy in the Management of Arrhythmias**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

DERMATOLOGY

October

9 **Dermatology Meeting**
7-9 P.M.—Schering Corporation, Kennilworth
(Dermatological Society of New Jersey)

10 **Common Tumors of the Skin**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

17 **Advances in Dermatologic Therapies**
9 A.M.-5 P.M.—UMDNJ-Robert Wood Johnson Medical School, Piscataway
(UMDNJ)

November

13 **Dermatology Meeting**
7-9 P.M.—Schering Corporation, Kennilworth
(Dermatological Society of New Jersey)

INFECTIOUS DISEASE

October

1 **AIDS Training and Resource Program for Hospital Health Educators**
11:30 A.M.-1 P.M.—University Hospital, Newark
(AMNJ)

4 **Counseling and Testing for HIV Infection**
11:45 A.M.-1 P.M.—John F. Kennedy Medical Center, Edison
(AMNJ and NJDOH)

10 **Identification and Management of HIV Infection**
9:30-10:30 A.M.—Bergen Pines County Hospital, Paramus
(AMNJ and NJDOH)

10 **Infectious Disease Conference**
8 A.M.-5 P.M.—Somerset Medical Center, Somerville
(Somerset Medical Center)

11 **Circle of Support: Caring for Children and Families with HIV**
8 A.M.-4 P.M.—Tropworld, Atlantic City
(AMNJ)

11 **Identification and Management of HIV Infection**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ and NJDOH)

11 **Clinical Management of HIV Infection**
11:45 A.M.-1 P.M.—John F. Kennedy Medical Center, Edison
(AMNJ and NJDOH)

17 **Diagnosis and Treatment of AIDS**
8-9 A.M.—Barnert Hospital, Paterson
(AMNJ and NJDOH)

17 **Clinical Management of HIV Infection**
9-10 A.M.—Raritan Valley Community College, North Branch
(AMNJ and NJDOH)

November

6 **Diagnosis and Treatment of AIDS**
8-9 A.M.—Underwood Memorial Hospital, Woodbury
(AMNJ and NJDOH)

8 **Issues and Perspectives: Neuropsychiatric and Psychosocial Aspects of AIDS**
8:30 A.M.-3:15 P.M.—Clarion Hotel, Edison
(UMDNJ)

12 **Identification and Management of HIV Infection**
1-2 P.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ)

MEDICINE

October

1 **8th Annual Corneal Transplant**
15 9 A.M.-3:30 P.M.—UMDNJ,
29 Newark
(UMDNJ)

2 **Grand Rounds**
9 8:30-10 A.M.—Elizabeth General
16 Medical Center, Elizabeth
23 *(Elizabeth General*
30 *Medical Center)*

3 **Aminoglycosides**
9-10 A.M.—Warren Hospital, Phillipsburg
(AMNJ)

3 **Prevention of Lower Extremity Amputations**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

3 **Diagnosis and Treatment of Neuroleptic Malignant**

TOWARD 2000 VI SYMPOSIUM

October 12th and 13th.

The sixth annual Toward 2000 Symposium is an opportunity to assess progress toward the goal of reducing cancer mortality in the United States. The symposium will be held at Fox Chase Cancer Center on October 12th and 13th. National experts will conduct seminars, workshops and informal dinner discussions focusing on common solid malignancies including lung, colon, and breast. Faculty will also discuss advances in autologous bone marrow transplantation and the role of immunotherapy.

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Syndrome
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

3 **Biomedical Ethics**
9 A.M.-1 P.M.—New Jersey Medical School, Newark
(UMDNJ)

3 **Management of Elevated Cholesterol in the Elderly**
1:30-2:30 P.M.—HIP/RCHP, New Brunswick
(RCHP and AMNJ)

4 **Biological Origins of Alcoholism**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

9 **How To Mend a Broken Heart**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

9 **Cosmetics: Choosing, Using, and Reactions to Them**
7-9 P.M.—Schering Corporation, Kenilworth
(Dermatological Society of New Jersey)

9 **Prevention of Lower Extremity Amputations**
8-9 A.M.—Barnert Hospital, Paterson
(AMNJ)

9 **Topics in Public Health**
23 12:15-1:30 P.M.—John Fitch Plaza, Trenton
(AMNJ and NJDOH)

10 **Lupus**
9 A.M.-4:30 P.M.—Hoffmann-LaRoche, Nutley
(Lupus Foundation)

11 **Cocaine Addiction**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

11 **Severe Limb-Threatening Ischemia**
12 Noon-1 P.M.—Community Medical Center, Toms River
(Community Medical Center)

11 **Diabetic Nephropathy**
1:30-2:30 P.M.—Vineland Developmental Center, Vineland
(AMNJ)

13 **Late Effects of Polio**
8 A.M.-3:30 P.M.—Somerset Marriott Hotel, Somerville
(Raritan Valley Post Polio Support Group)

13 **Cooper Medical Alumni Association**
1-7 P.M.—Hyatt, Cherry Hill
(Cooper Hospital/University Medical Center)

13- **Masoidectomy**
14 7:30 A.M.-4 P.M.—New Jersey Medical School, Newark

13- **Rheumatology**
14 1-4 P.M.—Great Gorge Resort, Vernon Valley
(UMDNJ)

15 **Meeting**
6:30 P.M.—The Manor, West Orange
(Neurological Association of New Jersey/Neurology Section, AMNJ)

16 **Citrate and Nephrolithiasis**
Overlook Hospital, Summit
(Nephrology Society of New Jersey)

16 **Bone Marrow Transplant**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

17 **Chronic Pain Management and Issues Related to Iatrogenic Addiction**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

17 **Prevention of Lower Extremity Amputations**
1-2 P.M.—V.A. Medical Center, Lyons
(AMNJ)

18 **Diagnosis and Treatment of Nicotine Addiction**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

20 **Clinical Advances in MRI and CT**
9 A.M.-5 P.M.—Sheraton at Woodbridge Place, Iselin
(UMDNJ)

20 **New Practice Program**
8 A.M.-3:30 P.M.—Medical Society of New Jersey, Lawrenceville
(MIIENJ)

20 **MRI Seminar**
8 A.M.-5 P.M.—Hyatt Regency, New Brunswick
(Radiology Society of New Jersey)

25- **Sexuality Today**
27 8:30 A.M.-4:30 P.M.—Holiday Inn, Somerset
(UMDNJ)

25 **Meeting**
6:30-9:30 P.M.—The Manor, West Orange
(Head and Neck Oncology Society/AMNJ)

26 **Newer Antibiotics**
12 Noon-1 P.M.—Mercer Medical Center, Trenton
(Mercer Medical Center and AMNJ)

29 **Sports Medicine**
5:30-8 P.M.—Robert Wood Johnson Medical Center, New Brunswick
(UMDNJ)

30 **Management of Type II Diabetes**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

31 **Fall Refresher**
8-4:30 P.M.—Sheraton at Woodbridge Place, Iselin
(New Jersey Academy of Family Physicians)

November

1- **Sinus Endoscopy**
2 7:30 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

3 **Obesity Update**
8 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

4 **Advances in Colony-Stimulating Factors**
9 A.M.-1 P.M.—Ramada Renaissance, East Brunswick
(UMDNJ)

6 **Grand Rounds**
13 8:30-10 A.M.—Elizabeth General
20 Medical Center, Elizabeth
27 *(Elizabeth General Medical Center)*

7 **Emergency Medical Care**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

7 **Newer Concepts in Asthma Management**
1:30-2:30 P.M.—HIP/RCHP, New Brunswick
(RCHP and AMNJ)

8 **Annual Meeting**
8 A.M.-4 P.M.—Hyatt Regency, New Brunswick
(NJ Society of Critical Care Medicine)

8 **Diabetic Nephropathy**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ)

11 **Diabetic Nephropathy**
7-8 P.M.—Wallkill Valley General Hospital, Sussex
(AMNJ)

12 **Hyperalimentation**
12 Noon-1 P.M.—Warren Hospital, Phillipsburg
(AMNJ)

12 **Renal and Pancreatic Transplantation Update**
7-8 P.M.—Wallkill Valley General Hospital, Sussex
(AMNJ)

13 **Management Symposium**
7-9 P.M.—Schering Corporation,

Hahnemann University

Department of Medicin

GRAND ROUNDS WEDNESDAYS

8:30 a.m.-9:30 a.m.

September-December, 1990

SEPTEMBER, 1990

September 5, 1990
CORONARY HEART DISEASE AND HOW TO PREVENT IT
William Roberts, MD
Chief, Pathology Branch, NHLBI, NIH
Clinical Professor of Medicine (Cardiology), and Pathology
Georgetown University, Washington, DC

September 12, 1990
DIAGNOSIS OF HIV INFECTION
Charles J. Schleupner, MD
Associate Professor of Medicine
University of Virginia School of Medicine
Chief, Infectious Diseases Section
VA Medical Center, Salem, VA

September 19, 1990
METABOLIC, NEUROLOGIC AND HEMATOLOGIC MANIFESTATIONS OF SPHINGOLIPIDOSIS
A. Charles Winkelman, MD
Professor of Clinical Neurology
Director, Neuro-Ophthalmology
Hahnemann University
S. Benham Kahn, MD
Professor and Vice Chairman
Neoplastic Diseases
Hahnemann University
David A. Wenger, PhD
Professor of Medicine, Biochemistry and Molecular Biology
Jefferson Medical College
Philadelphia, PA

September 26, 1990
CRITICAL CARE MEDICINE: ALVEOLAR EDEMA AND TISSUE OXYGEN TRANSPORT
Michael A. Mathay, MD
Associate Professor of Medicine and Anesthesia, Director, MICU, UCSF
San Francisco, CA
David R. Dantzker, MD
Professor and Director
Pulmonary and Critical Care Medicine
University of Texas Medical School
Houston, TX

OCTOBER, 1990

October 3, 1990
PITUITARY ADENOMAS: DIAGNOSIS AND TREATMENT
Peter Snyder, MD
Associate Professor of Medicine
Division of Endocrinology
University of Pennsylvania School of Medicine
Philadelphia, PA

October 10, 1990
CHANGING PATTERNS OF AIDS AND THE LUNGS
Philip C. Hopewell, MD
Professor of Medicine
University of California, SF
Chief, Chest Service, San Francisco General Hospital, CA

October 17, 1990
DIVISION OF CARDIOLOGY CLINICAL RESEARCH: CARDIAC IMAGING
Eric L. Michelson, MD
Professor of Medicine
Director, Division of Cardiology
Hahnemann University

October 24, 1990
CARDIAC REMODELING: CLINICAL IMPLICATINS AND THERAPEUTIC OPTIONS
Gervasio A. Lamas, MD
Assistant Professor of Medicine
Harvard Medical School, Boston, MA

October 31, 1990
DIABETIC NEPHROPATHY
Eli A. Friedman, MD
Professor of Medicine
Chief, Division of Renal Disease
SUNY Health Science at Brooklyn, NY

NOVEMBER, 1990

November 7, 1990
STEROID ABUSE IN THE ATHLETE
Robert Cantu, MD
Chairman of Surgery
Director, Services of Sports Medicine
Emerson Hospital, Concord, MA
Consultant, Sports Medicine Committee
USA American Boxing Federation

November 14, 1990
CONTROVERSIES IN NON-CARDIAC CHEST PAIN (Gastro-Esophageal Reflux, Achalasia)
Sidney Cohen, MD
Professor and Chairman of Medicine
Temple University School of Medicine
Philadelphia, PA

November 21, 1990
DIVISION OF PULMONARY MEDICINE AND CRITICAL CARE
Edward Schulman, MD
Associate Professor of Medicine
Director, Division of Pulmonary and Critical Care Medicine
Hahnemann Universtiy

November 28, 1990
MEDICAL MANAGEMENT OF DEPRESSION AND ANXIETY
Gary Tollefson, MD, PhD
Associate Professor of Psychiatry
University of Minnesota, MN
Jonathan O. Cole, MD
Chief, Psychopharmacology Program
McLean Hospital, Belmont, MA

DECEMBER, 1990

December 5, 1990
PTCA VS BYPASS GRAFT SURGERY FOR CORONARY ARTERY DISEASE
William S. Frankl, MD
Vischer Professor of Medicine and Chairman,
Department of Medicine
Director, Likoff Cardiovascular Institute
Hahnemann University

December 12, 1990
ABNORMALITIES OF THROMBOSIS AND THROMBOEMBOLISM
Daniel Deykin, MD
Chief of Medicine, Director, Health Services Research and Development
Boston VA Medical Center, MA

December 19, 1990
AGING OF THE SKIN
Richard L. Speilvogel, MD
Professor of Medicine and Dermatology
Director, Division of Dermatology
Hahnemann University

WEDNESDAY MEDICAL SEMINAR SERIES

8:30 a.m.-3:30 p.m.

September 26, 1990
CRITICAL CARE

October 10, 1990
AIDS TREATMENT

November 7, 1990
MEDICINE IN ATHLETICS

November 28, 1990
MEDICAL MANAGEMENT OF DEPRESSION AND ANXIETY

December 12, 1990
ABNORMALITIES OF THROMBOSIS AND THROMBOEMBOLISM

Seminar Directors:

William S. Frankl, MD
Professor of Medicine
and Chairman
Department of Medicine

Allan B. Schwartz, MD
Professor of Medicine
Director, Continuing
Medical Education for the
Department of Medicine

Location:
Classroom C (Alumni Hall)
2nd Fl. New College Bldg.
Hahnemann University
15th Street Entrance
15th & Vine Streets
Philadelphia, PA

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Kenilworth
(Dermatological Society of New Jersey)

14 **Coding Workshop**
9 A.M.-3 P.M.—MSNJ Headquarters, Lawrenceville
(Urology Society of New Jersey)

14 **Fall Refresher Course**
8 A.M.-4 P.M.—Sheraton Hotel, Woodbridge
(NJ Academy of Family Physicians)

14 **Cocaine Express**
9:15 A.M.-4:30 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

14 **Proper Use of Endoscopy**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

14 **Diabetic Nephropathy**
1:30-2:30 P.M.—Roosevelt Hospital, Metuchen
(AMNJ)

15 **Partial Hospitalization and Its Psychotherapeutic Role**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

15-17 **Third Conference on Radioimmunodetection and Radioimmunotherapy of Cancer**
All day—Princeton University, Princeton
(Center for Molecular Medicine and Immunology)

17 **The Breast**
8 A.M.-2 P.M.—Sheraton Poste Inn, Cherry Hill
(Cooper Hospital/University Medical Center)

17 **Office Computer Seminar**
8 A.M.-4 P.M.—Hyatt Regency Hotel, New Brunswick
(MSNJ and AMNJ)

17 **Slide Seminar: Bone Marrow and Spleen**
9 A.M.-1 P.M.—Robert Wood Johnson Medical School, New Brunswick
(NJ Society of Pathologists)

20 **Chronic Epstein-Barr Virus**
8-9 A.M.—Underwood Memorial Hospital, Woodbury
(AMNJ)

21 **Diabetic Nephropathy**
9-10 A.M.—Warren Hospital, Phillipsburg

26 **Sports Medicine**
5:30-8 P.M.—Robert Wood Johnson Medical School, New Brunswick
(UMDNJ)

27 **Parkinson Disease**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

28 **Clinical Update in Pulmonary Medicine**
8 A.M.-5:20 P.M.—Deborah Heart and Lung Center, Browns Mills
(Deborah Heart and Lung Center)

28 **New Practice Program**
8 A.M.-3:30 P.M.—MSNJ Headquarters, Lawrenceville
(MIIENJ)

29-30 **Hypnosis in Couples and Family Therapy**
8:30-4:30 P.M.—UMDNJ
(UMDNJ)

30 **Sickle Cell Disease**
12 Noon-1 P.M.—Mercer Medical Center, Trenton
(Mercer Medical Center)

OBSTETRICS/GYNECOLOGY

October

2 **Diabetes in Pregnancy**
8-10 A.M.—Barnert Hospital, Paterson
(AMNJ)

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Cardiology Update

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Wednesday, October 3, 1990 3:00-5:00 PM

The Electrocardiogram

Moderator: Ami Iskandrian, M.D.

3:00-3:20	Interesting and important electrocardiographic findings	*Leonard N. Horowitz, M.D.*
3:20-3:40	The benefits and limitations of exercise electrocardiography	*Norman Feinsmith, M.D.*
3:40-4:00	Slides of ECGs (unknowns) will be presented and discussed.	
4:00-5:00	Case Presentations	*David L. Scher, M.D.*
	Panel Discussion	
	Robert I. Katz, M.D.	*Terry Langer, M.D.*
	Steven J. Nierenberg, M.D.	*J. David Ogilby, M.D.*
	Gary J. Vigilante, M.D.	

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Presbyterian Medical Center designates this continued medical education activity for 2 credit hours in Category I of the Physicians' Recognition Award of the American Medical Association and the Pennsylvania Medical Society Membership requirement. Nine sessions, 18 credits.

16 **Diabetes in Pregnancy**
8-9 A.M.—Underwood Memorial Hospital, Woodbury
(AMNJ)

18 **Neonatal Problems**
7:30-8:30 P.M.—Freehold Area Hospital, Freehold
(AMNJ)

19 **Maternal Transport**
8 A.M.-1:30 P.M.—The Mansion, Main Street, Voorhees
(Cooper Hospital/University Medical Center)

20 **Hypertensive Disease in Pregnancy**
9 A.M.-4:30 P.M.—Saddle Brook Marriott, Saddle Brook
(Seton Hall University Graduate School of Medical Education)

November

2 **Semi-Annual Meeting**
8 A.M.-5 P.M.—Sheraton Meadowlands Hotel, Secaucus
(NJ Obstetrical and Gynecological Society)

4-7 **Fifth Annual Issues and Controversies in Ob/Gyn**
7 A.M.-1 P.M.—Contemporary Hotel, Walt Disney World, Lake Buena Vista, Florida
(UMDNJ)

17 **The Breast**
8 A.M.-2 P.M.—The Sheraton Poste Inn, Cherry Hill
(Cooper Hospital/University Medical Center)

17 **Women's Health Care**
9 A.M.-4 P.M.—St. Peter's Medical Center, New Brunswick
(UMDNJ)

17 **Subcutaneous Terbutaline Pump Therapy for Recurrent Preterm Labor**
6:30-7:30 P.M.—Yardley Country Club, Yardley
(Mercer Medical Center)

24 **Ultrasound**
9 A.M.-4 P.M.—St. Peter's Medical Center, New Brunswick
(UMDNJ)

ONCOLOGY

November

30 **Breast Cancer: Risks and Controversies**
8:45 A.M.-4:15 P.M.—Robert Wood Johnson Medical School, New Brunswick
(UMDNJ)

ORTHOPEDICS

October

26-27 **15th Annual New Jersey Orthopaedic Symposium in Conjunction with the 23rd Annual Northeastern Mid-Atlantic Orthopaedic Residents' Conference**
3:15 P.M.—Hyatt Regency, New Brunswick
(AMNJ and New Jersey Orthopaedic Society)

PSYCHIATRY

October

2 9 16 23 30 **Psychiatry Grand Rounds**
8:30-10 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

4 **Biological Origins of Alcoholism**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

5 **Annual Fall Meeting**
6:30 P.M.—Hyatt Regency, New Brunswick
(New Jersey Psychiatric Association)

11 **Cocaine Addiction: New Directions in Treatment**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

18 **Diagnosis and Treatment of Nicotine Addiction**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

24 **High Anxiety**
All day—Carrier Foundation, Belle Mead
(Carrier Foundation)

25 **Early Office Recognition of Depression Relating to Patient Management**
12 Noon-1 P.M.—Freehold Area Hospital, Freehold
(AMNJ)

November

1 **Research Update: Adolescence**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

6 13 20 27 **Psychiatry Grand Rounds**
8:30-10 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

7 **Treatment Plan and Goal Setting in Psychiatric Patients**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

8 **Psychopathology as Predictor of Treatment Outcome in Alcoholics**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

14 **Cocaine Express**
All day—Carrier Foundation, Belle Mead
(Carrier Foundation)

15 **Partial Hospitalization and its Psychotherapeutic Role**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

21 **Early Office Recognition of Depression**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

30 **Treatment of Borderline Personality Disorder with Self-Destructive Behavior**
10-11 A.M.—Marlboro Psychiatric Hospital, Marlboro
(AMNJ)

RADIOLOGY

October

18 **Radiology Meeting**
7:30 P.M—Saint Barnabas Medical Center, Livingston
(Radiology Society of New Jersey/AMNJ)

20 **MRI Seminar**
8 A.M.-5 P.M.—Hyatt Regency, New Brunswick
(Radiological Society of New Jersey)

November

15 **Radiology Meeting**
Saint Barnabas Medical Center, Livingston
(Radiology Society of New Jersey/AMNJ)

SURGERY AND ITS SPECIALTIES

October

18 **Surgical Grand Rounds**
5-6 P.M.—Shore Memorial Hospital, Somers Point
(Shore Memorial Hospital)

27-28 **Cardiac Surgery**
Bally's Park Place Hotel & Casino, Atlantic City
(Cooper Hospital/University Medical Center)

November

7 **Annual Meeting**
9 A.M.-5 P.M.—Dover General Hospital, Dover
(Society of Surgeons of New Jersey)

7 **Fall Scientific Meeting**
All day—The Manor, West Orange
(Vascular Society of New Jersey)

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The 6th Annual International Symposium on Acupuncture & Electro-Therapeutics will be held at Columbia University, School of International Affairs, 420 W. 118th St., N.Y. City, during October 25-28, 1990.

These meetings are co-sponsored by the International College of Acupuncture & Electro-Therapeutics & its official journal, Acupuncture & Electro-Therapeutics Research, The International Journal (published by Pergamon Press & indexed in 15 major indexing periodicals, including Index Medicus), Heart Disease Res. Foundn, N Y Pain Center of Long Island College Hospital (a teaching hospital of SUNY-Health Science Center at Brooklyn); Electrical Engineering Dept., Manhattan College; Nordic Medical Acupuncture Society (Scandinavia); Schmerz Therapeutische Kolloquium (West Germany); Japan Bi-Digital O-Ring Test Assn; etc. The meetings are also eligible for AMA CME Cat. I credit (about 40 credit-hours for the Symposium).

For information on meetings or submission or presentation of papers, contact Symposium Chairman, Prof. Y. Omura, M.D., Sc.D., 800 Riverside Drive (8-I) New York, NY 10032 Tel: (212) 781-6262 (10am to 10pm 7 days a week) or (212) 928-0658, Co-chairman, Prof. A.W. Cook, MD, (516) 877-1821, or Bro. Michael Losco (212) 920-0162.

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present

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in conjunction with

THE TWENTY-THIRD ANNUAL NORTHEASTERN-MID-ATLANTIC ORTHOPAEDIC RESIDENTS' CONFERENCE

SATURDAY, OCTOBER 27, 1990
7:15 a.m.-3:35 p.m.
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The Complications/Resident's Thesis Conference will be held on FRIDAY, OCTOBER 26, 1990 at the Hyatt Regency from 2:00 p.m.-5:45 p.m. This will be followed by a cocktail hour and dinner with spouses and faculty members at 6:00 p.m.

IN MEMORIAM

John W. Alexander. Born in Nashville, Tennessee, on March 14, 1919, and relocating to New Jersey, John Wesley Alexander, MD, died at the age of 71 in Orange on June 3, 1990. Dr. Alexander attended Meharry Medical College, Nashville, Tennessee, and received his medical degree in 1943. The following year, Dr. Alexander received his New Jersey medical license. Dr. Alexander interned at the former Homer Phillips Hospital, St. Louis, Missouri. A pediatrician, Dr. Alexander was affiliated with: the Hospital Center at Orange; Newark Beth Israel Medical Center; and Children's Hospital of New Jersey, United Hospitals Medical Center, Newark, that he helped to establish. Dr. Alexander had private pediatrics practices in Orange and Newark. He served in the United States Army Medical Corps for two years. Dr. Alexander was a member of our Essex County component and of the American Medical Association.

Lawrence G. Beisler. Word has been received of the death of Lawrence George Beisler, MD, of Westfield. Born in 1894 in Newark, Dr. Beisler died on June 1, 1990, at the age of 96. Dr. Beisler received his medical degree from the University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, in 1917 and his New Jersey medical license in 1919. A board-certified surgeon, Dr. Beisler was affiliated with Elizabeth General Medical Center; with Saint Barnabas Medical Center, Livingston; and with Rahway Hospital. Retired since 1964, Dr. Beisler was a member of the Society of Surgeons of New Jersey, of the American Medical Association, and of our Union County component. In addition, Dr. Beisle was a fellow of the American College of Surgeons. Upon receiving his medical license, Dr. Beisler served in the United States Navy Medical Corps from 1917 to 1919, as a ship doctor and surgeon on the *USS Bushnell* and the *USS Arizona.*

Norman T. Crane. Plainfield resident Norman Tompkins Crane, MD, died April 5, 1990, at the age of 88. Dr. Crane was born September 4, 1901 in Mahopac, New York. Dr. Crane received his medical degree from Columbia University College of Physicians & Surgeons, New York, in 1925 and his New Jersey medical license the following year. Dr. Crane completed his internship at Muhlenberg Regional Medical Center, Plainfield, and his residency at Columbia-Presbyterian Medical Center, New York. Aside from his private pediatrics practice, Dr. Crane was affiliated with Muhlenberg Regional Medical Center and with Somerset Medical Center, Somerville. In addition, Dr. Crane was a member of the board of governors of Muhlenberg Regional Medical Center in the late 1950s and was first vice-president of the Plainfield Board of Health. Dr. Crane served in the United States Medical Corps during World War II. During his lengthy career, Dr. Crane was a member of the American Medical Association, and of our Union County component.

Herbert Farber. An internist, Herbert R. Farber, MD, died at the age of 77. Born in Paterson on February 3, 1913, Dr. Farber died May 29, 1990. Dr. Farber received his medical degree from the University of Virginia School of Medicine, Charlottesville, Virginia, in 1940, interning at Saint Joseph's Hospital and Medical Center, Paterson, and serving a residency at the former Baltimore City Hospitals, Baltimore, Maryland. In 1948, Dr. Farber received his New Jersey medical license. Dr. Farber had his private medical practice in Paterson for over 40 years and was on the staff of Saint Joseph's Hospital and Medical Center. Dr. Farber was a member of our Passaic County component and of the American Medical Association. He served in the United States Medical Corps from 1942 to 1946 as captain.

Joseph W. Gamba. At the untimely age of 49, Joseph William Gamba, MD, died on May 10, 1990. Born September 22, 1940, in Newark, Dr. Gamba received his medical degree from the University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania, in 1966, and his New Jersey and Pennsylvania medical licenses the following year. Dr. Gamba served an internship at Delaware County Memorial Hospital, Drexel Hill, Pennsylvania, and a residency at Newark Eye and Ear Infirmary. An ophthalmologist, Dr. Gamba maintained an office in Toms River and was affiliated with Community Memorial Hospital, Toms River, and with Newark Eye and Ear Infirmary. Dr. Gamba was a fellow of the American College of Surgeons, of the American Academy of Ophthalmology and Otolaryngology, and of the International College of Surgeons. Dr. Gamba also was a member of our Ocean County component.

Arpad Gerard. After a long illness, North Brunswick resident Arpad G. Gerard, MD, died on May 21, 1990, at the age of 81. A native of Budapest, Hungary, Dr. Gerard was born May 14, 1909. Dr. Gerard received his medical degree from the University of Vienna, Austria, in 1933 and his New Jersey medical license in 1937. An internist, Dr. Gerard maintained a private practice in Woodbridge for many years. Dr. Gerard was affiliated with Raritan Bay Medical Center, Perth Amboy. He was a member of our Middlesex County component and of the American Medical Association.

John P. Lauricella. Word has been received of the death of John Patrick Lauricella, MD, of Englewood Cliffs on May 19, 1990, at the age of 61. Dr. Lauricella, born in Fairview on August 7, 1928, received his medical degree from Jefferson Medical College, Philadelphia, in 1954. One year later, he earned his New Jersey medical license. A family practitioner, Dr. Lauricella was affiliated with Holy Name Hospital, Teaneck, and Hackensack Medical Center. In addition, Dr. Lauricella was a professor of family practice at University of Medicine and Dentistry of New Jersey, Newark. Dr. Lauricella served in the United States Army from 1955 to 1957. He was a member of the American Medical Association and of our Bergen County component; and a fellow of the American Academy of Family Practice.

Arthur Mangelsdorff. Retired since 1975, Arthur F. Mangelsdorff, MD, died on June 11, 1990, at the age of 85. Born in Union City on August 15, 1904, Dr. Mangelsdorff received his medical degree from Cornell University Medical College, New York, in 1928. Two years later Dr. Mangelsdorff received his New Jersey medical license. Dr. Mangelsdorff practiced occupational medicine. He worked with American Cyanamid and later with Prudential. Dr. Mangelsdorff served in the United States Army Reserves from 1928 to 1938 as first lieutenant. In addition, Dr. Mangelsdorff was a member of the American Medical Association, of our Somerset County component, of the Industrial Medical Association, of the New Jersey Industrial Medical Association, of the American Academy of Occupational Medicine, and of the Academy of Medicine of New Jersey. Dr. Mangelsdorff also was a medical consultant at Somerset Medical Center, Somerville.

Michael J. Morrone. Born in Philadelphia, Pennsylvania, on November 21, 1906, Michael James Morrone, MD, died on April 21, 1990, at the age of 83. Dr. Morrone attended Hahnemann Medical College, Philadelphia, earning his medical degree in 1935. Dr. Morrone received his Pennsylvania medical license in 1936 and his New Jersey medical license in 1954. Dr. Morrone served an internship and a residency at St. Agnes Medical Center, Philadelphia. A general practitioner, Dr. Morrone practiced in Philadelphia and was affiliated with St. Agnes Medical Center and later relocated to Vincentown and St. Petersburg, Florida. In addition, Dr. Morrone was employed by the Philadelphia Naval Shipyard Medical Dispensary and by the health department of Florida. Dr. Morrone was a member of our Burlington County component, of the American Medical Association, and of the Pennsylvania Medical Society.

Charles C. Polk. At the age of 95, Charles Carrington Polk, MD, died May 18, 1990. Born in Barrington on April 12, 1895, Dr. Polk earned his medical degree from Howard University College of Medicine, Washington, DC, in 1921 and his New Jersey medical license the following year. Dr. Polk served an internship at the former Kansas City General Hospital, Kansas City, Missouri. A retired family practitioner, Dr. Polk was affiliated with St. Elizabeth Hospital, Elizabeth; Rahway Hospital; and Community Memorial Hospital, Toms River. Dr. Polk served in the Infantry from 1917 to 1918. He was a member of the American Academy of General Practice, of the American Medical Association, of the Academy of Medicine of Northern New Jersey, of our Union County component, and of the North Jersey Medical Society, serving as secretary in 1939 and as president in 1942. In addition, Dr. Polk was involved in various community services.

Walter T. Rados. Born in Newark on June 14, 1926, ophthalmologist Walter Thomas Rados, MD, died May 12, 1990, at the age of 63. After earning his medical degree from Jefferson Medical College, Philadelphia, in 1951, Dr. Rados received his New Jersey medical license the following year. Dr. Rados served his residency at the Wilmer Institute at Johns Hopkins University, Baltimore, and his internship at Newark Beth Israel Medical Center. From 1952 to 1954, he served in the military, with a terminal rank of captain. Dr. Rados had his practice in Essex county for many years and was affiliated with several Newark hospitals: Newark Beth Israel Medical Center, Newark Eye and Ear Infirmary, and the University of Medicine and Dentistry of New Jersey-University Hospital. Dr. Rados was a member of our Essex county component and of the American Medical Association; he was a fellow of the American Academy of Ophthalmology and Otolaryngology, of the New Jersey Academy of Ophthalmology, and of the Academy of Medicine of New Jersey.

EDITORIAL CRITERIA

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1. Goldwyn RM: Subcutaneous mastectomy. *NJ MED* 74:1050-1052, 1977.
2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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NEWSWATCH

HEALTH ACCESS NEW JERSEY

In August, MSNJ leadership met with Governor Jim Florio and presented him with the Society's position paper on health care, Health Access New Jersey, featured on page 785. A summary of the paper follows.

I. A plan proposed by the Medical Society of New Jersey to:

--Ensure that patients have the ability to choose physicians, hospitals, and health care plans.

--Create incentives to make new technologies available.

--Sustain an excellent medical education system.

--Nurture high standards of conduct.

--Reduce the need for defensive medicine.

II. Action to solve the uncompensated care crisis:

--Expand access to care by raising Medicaid eligibility and increasing payments to individual providers.

--Create a state-operated health insurance pool for small businesses similar to the temporary disability program.

--Foster health insurance risk pools to cover those who cannot obtain affordable insurance.

--Eliminate health insurers' pre-existing loss requirement and waiting period for workers to gain coverage after changing jobs.

III. Medicine's role in reducing costs:

--Encourage disease prevention and healthier lifestyles.

--Require physicians to practice with the highest ethical standards.

--Develop standard practice parameters for all specialties.

IV. Government's role in reducing costs:

--Enact professional liability reforms to lessen the incidence of defensive medicine.

--Eliminate the certificate of need requirement for diagnostic equipment or raise the dollar threshold to $2 million.

--Redesign the hospital rate-setting program to make it rational, understandable, and reflective of the active cost of hospital care.

MSNJ NEWSLETTER

BILLING FOR MEDICAL INFORMATION TO THIRD PARTIES

All physicians are reminded that except for the completion of health insurance claim forms, they have the right to bill for providing patient information to third parties. The MSNJ Board of Trustees has notified both the commissioner of labor and the commissioner of insurance of this policy.

MEDICAL FEE SCHEDULES/AUTO INSURANCE PIP COVERAGE

The following letter was sent to Verice M. Mason, assistant commissioner, Legislative/Regulatory Affairs, New Jersey State Department of Insurance from Vincent A. Maressa, MSNJ executive director/general counsel:

This will respond to the notice published in the *N.J. Register* regarding proposed rule N.J.A.C. 11:3-29.

The Medical Society of New Jersey is opposed to the rule as an abridgement of constitutional rights of physicians.

The Fair Automobile Insurance Reform Act and the Regulation being proposed pursuant to it are illegal.

- The Legislature of New Jersey, by enacting the Fair Automobile Insurance Reform Act of 1990 (FAIRA), has impaired the contractual rights of physicians to receive their usual and customary fees as compensation for services provided those patients who have been injured in an automobile accident in violation of the U.S. Constitution, Article I, Section 10, Clause 1.
- The fee schedule proposed by the Department and the ban on balance billing as stated in FAIRA have impaired the contractual rights of physicians to receive their usual and customary fees as compensation in violation of Article I, of the New Jersey State Constitution.
- In denying physicians the opportunity to bill and collect from their patients, by mutual agreement, the difference between their customary fees for the services they have provided and the amount reimbursed through the fee schedule, the Legislature has denied physicians access to lawful contractual remedies in violation of Article IV, Section 7, Paragraph 3 of the New Jersey State Constitution.
- The ban on balance billing contained in FAIRA and repeated in the proposed regulation violates Article IV, Section 7, Paragraph 4 of the New Jersey State Constitution since the law embraces more than one object and those objects were not properly set forth in the title of the act.
- The imposition of a cap on physician fees and a ban on contractual arrangements are punitive and retaliatory in nature and are being applied to physicians to punish them as a class for what the Legislature and the Department perceive as the wrongful involvement of physicians in an automobile insurance system that encouraged mismanagement and the potential misuse of private and public monies. The cap on fees and the ban on balance billings, in particular, are legislatively imposed punishments intended to penalize physicians for their perceived past wrongdoing.
  These punishments were imposed without lawful judicial process or procedural safeguard. The physicians of New Jersey were singled out, tried, convicted, and sentenced by the Legislature for what is believed to be their part in bringing about the chaos that was and is the New Jersey automobile insurance system. Article I, Section 10,

Clause 1 of the U.S Constitution bans legislative determinations of guilt and impositions of punishment as bills of attainder.

- By singling out physicians and certain others, but not all professions, for disparate treatment without rational basis, the Legislature and the Department are denying physicians the equal protection required under the Fourteenth Amendment to the U.S Constitution.

If FAIRA is constitutional, the proposed fee schedule is not.

- Since FAIRA imposes a ban on balance billing, any fee schedule used pursuant to it must be comprehensive in scope both regarding all health professions and the services they provide.
- The fee schedule proposed does not cover all services or specialties within the medical profession commonly involved with services to automobile accident benefits.
- A significant number of health providers, other than physicians are mentioned in FAIRA, but their services are not included in the proposed regulation.

If the proposed regulation is constitutional, it does not meet the statutory requirements of FAIRA.

- In a number of instances, the reimbursement allowed is greater in Region I or II rather than Region III. That is clearly unreasonable and does not comply with well-known economic factors.
- The Legislature clearly intended that the fee schedule be specialty specific by region unless less than 50 physicians of a given specialty were within that region. The proposed schedule does not meet that standard.
- The Legislature clearly mandated that the schedule must pay at the 75th percentile. The schedule has a number of procedures and reimbursements that do not meet that standard as it is applied by the federal government under Medicare, i.e. CPT codes 20670, 23500, and 23650.
- The fee schedule does not cover all procedures intended by the statute.
- The fee schedule does not cover the services of all professions intended by the Legislature and named in the statute.
- The fee schedule does not meet the standard of a rational relationship to the act adopted by the Legislature in terms of scope, consistency, and quality.
- The fee schedule cannot be rationally applied to the services rendered to the critically injured patients at trauma centers.
- The fee schedule treatment of multiple procedure situations can only be reasonable when applied to routine elective surgery and not to emergent or critical situations.
- The fee schedule does not properly reimburse for comprehensive examinations, consultations, and followup visits.

Regardless of the overall constitutionality of FAIRA, it is obvious that the proposed schedule does not fairly represent compliance with FAIRA.

I again urge the Department to invoke a broad-based panel of experts to assist in the development of a fee schedule that can meet the statutory standard. As we have previously offered our assistance, we do so again.

MEDICAL WASTE PROGRAM REGISTRATION REQUIREMENTS

Regulation N.J.A.C. 7:26-3A.8(2) requires anyone who generates regulated medical waste in New Jersey must register with the New Jersey State Department of Environmental Protection, Division of Solid Waste Management, as a regulated medical waste generator and pay the appropriate fee. The second registration year for generators extends from July 22, 1990, through July 21, 1991. All generators who have failed to register for the 1989-1990 year will be responsible for registering for that year and the 1990-1991 registration year. Failure to do so will subject the generator to potential fines. All generators are assigned identification numbers upon registration. Generators of regulated medical waste must file an annual report as specified by N.J.A.C. 7:26-3A.21(h). The initial annual generator report covers the period from June 22, 1989, to June 21, 1990. The report forms are to be completed and returned to the Bureau of Special Waste Planning within ten days of receipt by the generator. A copy of the revised daily/monthly log form and instructions will be included with the report form mailing to generators. Use the new form upon receipt. A hotline number, 609/530-8599, will be available to assist generators of medical waste with their questions concerning completion of the annual report.

PHYSICIAN ASSISTANTS

The following are the comments of Herbert J. Stern, Esquire, legal counsel to MSNJ regarding proposed new rule N.J.A.C. 13:35-6.15. The Medical Society of New Jersey and its members oppose N.J.A.C. 13:35-6.15 for the following reasons:

1. Promulgation of the regulation amounts to creating a new class of physicians, an act that exceeds this Board's statutory authority under N.J.S.A. 45:9-1, et seq.
2. The Legislature by considering and rejecting bills to authorize physician assistants has signalled its direct opposition to the regulation; and
3. The regulation itself is poorly drawn because it illegally delegates the power to authorize nondoctors to practice medicine to individual hospitals.

Since the early 1970s, states have wrestled with the issue of permitting nonlicensed physicians to perform medical procedures. There has been a great deal of debate about this subject. I do not intend to address in detail whether the proposed rule will be of any value to the public. I will leave that to the medical professionals who will testify here today. Instead, I will focus on the legal deficiencies presented by the proposed rule being considered by the Board.

The first issue I would like to address is this Board's lack of authority to take the proposed action. An administrative action is void if it does not fall within the boundaries of the legislative delegation involved, e.g. Swede versus City of Clifton, 22 N.J. 303, 312 (1956). Administrative action is of necessity restrained by the declared policy and spirit of the statute and the criteria and standards therein laid down, for a grant not thus confined would constitute a delegation of essential legislative power in contravention of constitutional limitations, Abelson's, Inc. versus N.J. State Board of Optometry, 5 N.J. 412, 423 (1950). "Rules and regulations [as promulgated by an administrative agency] cannot subvert or enlarge upon the statutory policy . . . ." Id. at 424. This is precisely what the Board would be doing should it choose to enact the proposed regulation.

This Board owes its existence to the Medical Practice Act, N.J.S.A. 45:9-1 et seq. This act of the Legislature not only created the Board and defined its authority and powers, it also defined the practice of medicine (N.J.S.A. 45:9-5.1 and N.J.S.A. 45:9-18) and declared the practice of medicine without a license from this Board to be illegal (N.J.S.A. 45:9-22). The letter and intent of the Medical Practice Act was to create a regulatory scheme to protect the public that would require persons in New Jersey to satisfy certain stringent requirements including four years of an accredited medical school and certain written examinations before permitting them to practice medicine. This Board was created to monitor these persons and to ensure that the qualifications specified by the Legislature are met. This Board does not have the authority to change those qualifications that were established by statute, e.g., N.J.S.A. (45:9-15 through 45:9-6). Accordingly, this Board has discretion to regulate the practice of medicine including establishment of substantive standards for medical practice, e.g. Brodie versus State Board of Medical Examiners, 177 N.J. Super. 523 (App. Div. 1981).

However, there is a substantial distinction between regulation and legislation. The proposed regulation constitutes a direct subversion of this Board's enabling legislation. It creates an entire new class of practitioners of medicine, unlicensed practitioners who lack the legislatively mandated qualifications. The Board concedes that, under this regulation, physician assistants will be authorized to perform medical tasks including, among others, examinations of patients and assisting physicians in surgery. Such acts would directly violate N.J.S.A. 45:9-22 that makes it illegal to practice medicine without meeting the requirements, including licensing, established by the Legislature. The Legislature has clearly set forth in N.J.S.A. 45:9-21 all persons exempted from this prohibition. Physician assistants were not excepted by the Legislature and are therefore subject to the prohibitions of N.J.S.A. 45:9-22.

Since the Board was not given the authority to rewrite or amend N.J.S.A. 45:9-21 and 45:9-22, it does not have the authority to promulgate this regulation.

But we need not rely solely upon the text of the Medical Practice Act to determine the Legislature's intent in this instance. The Legislature has on a number of occasions specifically considered legislation to authorize the use of physician assistants and rejected such legislation. In particular:

1. On June 14, 1971, A-2500 was introduced to grant this Board the authority to develop and approve programs for the training of syniatrists and to approve those individuals to perform certain specified medical services under the supervision of a duly licensed physician or surgeon. The bill never was brought to a vote and did not pass.
2. Again, on April 12, 1976, S-1354 to authorize the use of physician assistants was introduced and referred to the Committee on Labor Industry and Professions. The bill never was brought to a vote and did not pass.
3. On May 1, 1978, A-1314 to authorize the use of physician assistants was introduced and assigned to the Committee on Commerce Industry and Professions. The bill never was brought to a vote and did not pass.
4. On May 15, 1978, A-1387 was introduced and referred to the Committee on Institutions Health and Welfare. The bill was reported out of Committee on February 13, 1979, amended but never was voted upon and did not pass.
5. On May 25, 1978, S-1192 to authorize physician assistants was introduced and assigned to the Committee on Labor Industry and Professions. It never was brought to vote and did not pass.
6. On June 12, 1980, A-1753 to authorize physician assistants was introduced and referred to the Committee on Institutions, Health and Welfare. The bill was reported out of committee on October 6, 1980, given a second reading and amended. It never was brought to a vote and did not pass.
7. On May 10, 1982, S-1349 to authorize the use of physician assistants in cardiovascular surgery was introduced and assigned to the Committee on Labor Industry and Professions. It was reported out of Committee on February 9, 1983, given a second reading, and amended. On May 23, 1983, it was returned to second reading and amended again. It was not brought to vote and it did not pass.
8. On November 19, 1984, A-2889 to authorize the use of physician assistants was introduced and referred to the Committee on Health and Human Services. It never was brought to vote and did not pass.

Moreover, the Legislature has specifically considered whether this Board should be permitted to authorize physician assistants. S-1591 to prohibit the regulatory authorization of physician assistants was prefiled in 1988, assigned to the Committee of Health and Human Services, amended on February 1, 1988, released from the Committee with a second reading and passed the Assembly on February 18, 1988. The bill was received in the Senate, but never was brought to a vote. Currently, a similar bill, A-3529, is pending in the Legislature.

As the foregoing legislative history demonstrates, the Legislature's clear intent was to reserve the authorization of physician assistants to the Legislature and not to delegate this authority to this Board. Moreover, the Legislature on eight separate occasions has been presented with the opportunity to authorize the use of physician assistants and has chosen not to do so, thereby demonstrating its intent. One half of the Legislature has directly demonstrated its intent that the Board not be permitted to enact such regulations. Such a clearcut and overwhelming demonstration of the legislative intent with respect to physician assistants demonstrates that this Board would be exceeding its authority and jurisdiction by considering and issuing the proposed regulations or any regulations that seek to authorize physician assistants. The more prudent and indeed the lawful course would be to wait for the Legislature to pass such legislation clearly authorizing the Board to promulgate these regulations and/or directly authorizing physician assistants. The correctness of this course also may be seen from the fact that every state in the country that has authorized the use of physician assistants with the exception of Mississippi has done so through legislative action rather than through Board regulations.

As an aside, it should be noted that available data reveal that approximately 25 physician assistants per year are graduated in New Jersey. Under the proposed regulations, approximately 160 health facilities exist and could qualify to employ physician assistants. This would mean it would take at least seven years before even one physician assistant was placed in each of the qualified facilities. Thus, the impact and value of such physician assistants in providing medical services to New Jersey residents would be negligible at best.

In addition to the fact that the Board has no authority to issue this regulation, the regulation itself illegally delegates to hospitals the authority to authorize nonlicensed persons to practice medicine. This Board's regulation N.J.A.C. 13:35-4.1 requires an assisting surgeon to be present at every "major" surgical procedure. However, the Board never has defined what is meant by the term "major" and has left such determinations to the individual hospitals. As a result, various hospitals in New Jersey define major surgical procedures differently.

Regulation 13:35-4.1 in itself is legally flawed since it unlawfully delegates the Board's authority to determine when the use of an assisting surgeon is required. However, this flaw is compounded in the current legislation. Under proposed rule 13:35-6.15, paragraph D(7), a physician may delegate to a physician assistant the task of "assisting a supervising surgeon in the operating room when a qualified first assistant surgeon is not required pursuant to N.J.A.C. 13:35-4.1." Since the Board has delegated the determination of when an assisting surgeon is required to the individual hospitals, this provision delegates to the hospital the authority and ability to authorize physician assistants to practice medicine and to independently determine which operations a physician assistant may assist in. It is unquestionable that the Legislature did not intend and did not authorize this Board to delegate the authority to individual hospitals to determine on a case-by-case basis when physician assistants may practice medicine.

Given the legislative history rejecting physician assistants, the legal deficiencies of the proposed regulation and the negligible effect this rule would have on the provision of medical services to the public, the Medical Society of New Jersey respectfully submits that the Board should not enact proposed Rule N.J.A.C. 13:35-6.15. Such action would be an unauthorized "extra jurisdictional administrative act" under Swede versus City of Clifton and would subvert not only this Board's enabling legislation but the clear legislative intent rejecting such action.

HEALTH CARE POLICY STUDY COMMISSION ADDRESSED

The Assembly Health Care Policy Study Commission was called upon to devise ways to make medical insurance more available to New Jersey residents. A national representative of the Communications Workers of America addressed the Commission and stated that everyone is entitled to health care: "This is the only industrialized country that doesn't have some sort of health plan that gives people a right to guaranteed health care." More than 800,000 people in New Jersey are without some kind of health insurance coverage although more than half are employed according to Assembly statistics.

NJHA REQUESTS MAJOR CHANGES TO SYSTEMS

The New Jersey Hospital Association has presented a report to the Governor's Commission on Health Care Costs that includes the request for the development of a new hospital payment system. NJHA wants the new system to be less complex, more prospective, and more timely that would limit the number of appeals. NJHA has called for the elimination of the current "confusing" patient billing system. Currently, inpatients are billed based on averages for 600 different medical diagnoses. It was reported that NJHA called for patient bills based on charges incurred. Another recommendation in the report calls for a statewide payroll tax on employers and employees to finance a mandatory health insurance plan for all workers in the state.

FINI

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MR. GLICKMAN IS A FORMER ADMINISTRATIVE LAW JUDGE OF THE STATE OF NEW JERSEY.

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PROFESSIONAL LIABILITY

STANDARD OF CARE: THE HONEST ERROR OF JUDGMENT RULE

In malpractice cases, the performance of physicians traditionally has been judged according to the customs of the profession. The reasonableness of a physician's conduct usually is determined by the conduct of other reasonable and prudent physicians in similar circumstances.[1] Expert testimony is typically required to establish the standard of care as well as a breach of that standard. This approach suggests that the standard in malpractice cases is objective and scientific. It also suggests that there is a correct procedure or treatment in each case. In fact, however, the practice of medicine is rife with uncertainty. Rarely is there only one correct approach to or treatment of a particular medical condition. In this regard, it is often said that the practice of medicine is more an art than a science.

As the practice of medicine develops and changes, the applicable standards of care have been modified to reflect these changes. Some modifications of the standard of care take into account the artistic side of medical practice. These modifications permit courts to apply a more subjective standard of care. For example, several courts have held that physicians are not liable for mere "honest errors of judgment."[2] The honest error of judgment rule amounts to a recognition of the problem of medical uncertainty. Its purpose is to protect a physician from liability for a mistake in judgment where there is more than one reasonable course of action available under the circumstances. While some courts have recently upheld the inclusion of an honest error of judgment instruction, other courts have held it to be improper.

In Ouellette by Ouellette versus Subak,[3] the Minnesota Supreme Court reaffirmed the vitality of the honest error of judgment rule.[3] This case arose out of a birth-related neurological injury. The plaintiffs alleged that the defendants had failed to properly manage the pregnancy by permitting a prolonged pregnancy, failing to timely induce labor, and failing to recognize signs of fetal distress. The evidence revealed that the physicians were uncertain as to the estimated due date of the baby. The trial court refused to give the honest error of judgment instruction requested by the defense despite the fact that the rule had been recognized in Minnesota since 1907. In discussing the reasons for the honest error of judgment rule the Ouellette court quoted from Staloch versus Holm:[4]

> In an ordinary action for negligence, that a man has acted according to his best judgment is no defense. The standard of careful conduct is not the opinion of the individual, but is the conduct of an ordinarily prudent man under the circumstances . . . . With respect to matters resting upon pure theory, judgment, and opinion, however, there is a generally recognized variation from this sound general principle.
>
> Cases of malpractice may be within the exception. A physician entitled to practice his profession, possessing the requisite qualifications, and applying his skill and judgment with due care, is

> not ordinarily liable for damages consequent upon an honest mistake or an error of judgment in making a diagnosis, in prescribing treatment, or in determining upon an operation, where there is reasonable doubt to the nature of the physical conditions involved or as to what should have been done, in accordance with recognized authority and good current practice.
>
> Most professional men are retained or employed in order that they may give the benefit of their peculiar and individual judgment and skill. A lawyer, for example, does not contract to win a lawsuit, but to give his best opinion and ability. He has never been held to liability in damages for a failure to determine disputed questions of law in accordance with their final decision by courts of appeal. It would be just as unreasonable to hold a physician responsible for an honest error of judgment on so uncertain problems as are presented in surgery and medicine.[5]

While reaffirming the validity of the reasons for the rule, the court nonetheless expressed concern over the subjective nature of words such as "honest."[6] In elaborating on the need to protect professionals from liability for non-negligent errors in judgment, the court stated:

> If there are two methods of treatment for a particular medical condition, both accepted by the medical profession, then it is a matter of professional opinion or judgment which is best, and the doctor's choice of either is, ordinarily, not negligence. But what if the two methods of treatment depend on different factual bases, i.e. if one method is acceptable, if the facts are one way and the other method is acceptable if the facts are another way, and neither method is acceptable for both sets of facts? Then the doctor who fails to use reasonable care to ascertain the facts may be negligent if he or she does not choose the accepted method or treatment for the factual condition a reasonably prudent doctor would have ascertained.
>
> But what if, at the time a decision must be made, all the requisite facts, even with the exercise of reasonable care, cannot be ascertained and either of two methods of treatment reasonably appears acceptable? At times a doctor may have to make a decision on the basis of incomplete, unclear, or tentative data. Obviously, this creates a situation that leaves a doctor vulnerable to hindsight and second guessing if the result is bad. Therefore, the court in Staloch said a doctor should not ordinarily be liable for an honest error of judgment 'where there is reasonable doubt' as to the nature of the physical conditions involved or as to what should have been done.

In conclusion, the Ouellette court held that the case should be remanded for a new trial because of the trial court's failure to give an appropriate instruction on the problem of medical uncertainty. Instead of the traditional "honest error of judgment" instruction, it proposed the following instruction:

> A doctor is not negligent simply because his or her efforts prove unsuccessful. The fact a doctor may have chosen a method of treatment that later proves unsuccessful is not negligence if the treatment chosen was an accepted treatment on the basis of the information available to the doctor at the time a choice had to be made; a doctor must, however, use reasonable care to obtain the information needed to exercise his or her professional judg-

> ment, and an unsuccessful method of treatment chosen because of a failure to use such reasonable care would be negligence.[8]

The Iowa Supreme Court also recently reaffirmed the propriety of giving an honest error in judgment instruction.[9] Other cases, however, have held that the inclusion of an error in judgment instruction is improper.[10] For example, in Rogers versus Meridian Park Hospital,[11] the Oregon Supreme Court held that the trial court erred in giving an honest error of judgment instruction. The court stated:

> (1) A physician is charged with applying without error those principles and learnings that are settled and agreed upon by all members of the medical profession. (2) In some cases, there may be reasonable differences of opinion among members of the medical profession as to the nature of the patient's condition or the proper course of treatment. (3) When there is such a difference of opinion, the physician must exercise reasonable judgment. (4) A physician is liable for an error of judgment if the physician fails to act with reasonable care and skill in exercising that judgment. (5) A physician is not liable for an error in judgment if the physician acts with reasonable care and skill in exercising such judgment.[12]

The plaintiff in Rogers had abdominal surgery. Afterwards he regurgitated and aspirated matter from his stomach. Subsequently, the plaintiff suffered related permanent lung and kidney damages and filed this action to recover for those injuries. Expert testimony established that the endotracheal tube should be used to assist breathing and prevent aspiration of stomach material into the lungs. However, there was a difference of opinion as to when this tube should be removed from a patient. The plaintiff's expert testified that the defendant prematurely removed the tube. The defendant's experts testified that the removal of the plaintiff's tube was timely and was an appropriate medical alternative. In addition, the experts also differed over the appropriate position in which to place a patient during recovery in order to reduce the risk of aspiration.

The Rogers court noted that the honest error of judgment rule is "derived in part from the notion that a doctor does not promise a cure and that an untoward result might not be a result of negligence."[13] It also derived in part "from the recognition that if there is more than one acceptable treatment option, then the selection of one of them is not negligence."[14] Nonetheless, it noted that courts in several other jurisdictions had recently disapproved of the use of an error of judgment instruction. It concluded that the instruction was "unduly confusing" and noted that the "fundamental issue" in malpractice cases is "whether the defendant breached the standard of care and caused injury to the plaintiff."[15]

In Leazer versus Kiefer,[16] the Idaho Court of Appeals followed the Rogers decision and held the instruction to be improper. The court noted that the Oregon court had recognized a growing trend of decisions that disapproved of such instructions. It held that the honest error of judgment instruction obscured the physician's obligation to meet the standard of care, skill, and diligence required by law. Moreover, it could be interpreted as absolving a physician from liability if he exercised his best judgment despite the fact that he was negligent. The Leazer court concluded that the honest error of judgment rule should not be used as a substitute for the requirement of reasonable care. (Reprinted from *Medical Malpractice Reports,* Albany, NY, July 1990, Vol. 3, No. 12.). Footnotes will be furnished upon request. ☐

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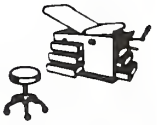

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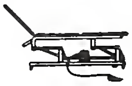

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EDITOR'S DESK

A TIME OF LOWERING EXPECTATIONS

"It has become more and more apparent that government, in all its ramifications, is the number one problem to the medical profession. There is a certain amount of irony in this situation. In all the polls the physician is considered a member of the most honorable and respected occupation or profession. Conversely, when the question is asked, 'What are the three greatest lies?'—regardless of what any two of the answers may be—the third lie always is, 'I'm from the government and I'm here to help you.' . . . All three branches of government participate in the process—the courts to some extent, and the legislative and executive branches to the point of rebellion."[1]

Today, we have great concerns about the Governor's Commission on Health Care Costs. We had pointed out earlier that MSNJ had no input into the composition of this special committee. It became even more apparent that MSNJ would have equally deficient input of information to the executive branch—information that could be used to formulate policy based on reason, logic, and facts. MSNJ's Committees on Uncompensated Care and on Patient Care for the Under-Insured have been stymied by the indifference of the New Jersey State Department of Health, and the Advisory Board of the Uncompensated Care Trust Fund was mothballed pending preliminary reports of the Commission.

The MSNJ Board of Trustees, taking a cue from the AMA, presented a new and innovative program to the governor: Health Access New Jersey. The full text of the report appears on page 785 and a summary appears in the "Newswatch" section. We would like to tell you that these efforts of MSNJ and its Board have borne fruit; we cannot. The presentation was pruned, and we expect a skimpy harvest.

A recent survey published by *Money* magazine listed 80 sites in the United States that are more desirable as residences than is New Jersey. Monmouth and Ocean counties, listed 32nd last year, now head the New Jersey listing in 81st place. Middlesex, Somerset, and Hunterdon counties fell from 8th place to 105th place. Bergen and Passaic counties dropped from 28th place to 206th place. We can joke about the elevation of Duluth—average January temperature of 0 to 20 degrees—from 51st to 21st slot. We can rail about Governor Jim Florio and his record setting, in both speed and in size, tax bite. But the precipitous fall in the rankings is there for all to see and the high per capita income of New Jersey citizens will not erase it. Many economists ascribe the denigration to crowding and to our economy—dropping incomes and worsening costs of living. The Pocono Mountains real estate brokers are reaping some of the benefits we are losing, as New Jerseyans look for economic relief by moving across the Delaware.

(Are you listening, Governor Jim?)

The Northwestern Life Insurance Company released a different type of list—its latest, state-by-state, health rankings. These rankings were based on five factors: lifestyle, access, disability, disease, and mortality.

"Lifestyle" included smoking, crime, career, and level of education. "Access" evaluated such things as unemployment rates, prenatal care, and shortage areas. "Disability" had two components, relating to the proportion of those disabled and to the number of physician visits. "Disease" meant cancer, heart disease, and infectious disease, including AIDS. And "mortality" was age and rate adjusted, weighted toward younger age groups. Overall, New Jersey ranked 16th of 50 states. It was 41st in "diseases"; 21st in "disability"; 19th in "mortality" and in "lifestyle"; and 4th in "access." Interestingly, despite all the brouhaha about the underinsured, the sick and injured in New Jersey have the fourth best access to care in the entire country—a tribute to the caring and professional New Jersey physician, and yet, still not good enough; hence, Health Access New Jersey. The other four criteria in the Northwestern survey are societal in nature and cannot be solved by further restrictions on the health care professional. We hope, but are not too hopeful, that the Commission and its sponsor also will consider this health survey, New Jersey's ranking, and Health Access New Jersey.

(Are you listening, Governor Jim?)

"It is upsetting to have lesser skilled paraprofessionals raised to levels unwarranted by their training. . . . It is unnerving for Big Brother to be looking over one's shoulder and monitoring even the most inconsequential of physician activities. It is unfair for bureaucrats and legislators to attempt to fix physician reimbursement as add-ons to regulations and statutes. . . . It is foolhardy for government to alter radically the payment for health care in favor of an untried system. . . . And, it is intolerable for all of these constricting and restricting actions to be promulgated and instituted without the proper involvement of the medical profession. Yet, such is the case. Two hundred years ago this country heard the battle slogan, 'Taxation without representation is tyranny.' Perhaps it is time for us to renew that slogan, with or without another tea party."[1]

Are you listening, Governor Jim? Or is it already too late for you and for our patients?

> "No man is good enough to govern another man without the other's consent." Abraham Lincoln, 1854

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[1] Slobodien HD: Time of high adventure. *J Med Soc NJ* 80:417, 1983.

BOOK REVIEWS

CORE TEXTBOOK OF PEDIATRICS

Robert Kaye, MD, Frank A. Oski, MD, Lewis A. Barness, MD (eds). Philadelphia, PA, J.B. Lippincott Company, 1988. The third edition of *Core Textbook of Pediatrics* by Kaye, Oski, and Barness was designed for the medical student, but may be an appropriate companion for the pediatric and family practice junior house officer as well.

The contributing authors represent pediatric subspecialties from a wide range of prestigious teaching institutions. The book is organized into both systems and pediatric problems. The emphasis is on basic pathology, pathophysiology, and management of the most common pediatric problems. Diagrams, charts, and algorithms are plentiful and are very useful, especially in the teaching of differential diagnosis. Practical considerations in management will serve house staff quite well.

A few chapters stand out as especially practical: "Dehydration and Fluid Replacement" coauthored by Curran and Barness, provides a step-by-step approach to fluid management by using actual cases; Tunnessen's chapter on enuresis is short and excellent; and Honig's chapter on skin is very complete in describing common skin disorders, but fails to provide management strategies to make it useful to students or house officers. (Photographs also would be quite useful in this chapter since much of what medical students and pediatric residents see in pediatric clinics are the common dermatoses of childhood.)

The bibliographies at the end of each chapter are short. There could be more current references to encourage pediatric residents to review the literature. It should be noted, however, that the synopsis provided for each reference is an excellent tool for the reader.

Baker's chapter, "Mental Retardation," and Oski's chapter, "The Dying Child," are superb additions to an introductory text. The topics are handled well and introduce these difficult subjects often avoided by house staff. Julia McMillan's chapter, "Principles of Antimicrobial Therapy," has a concisely organized chart matching organisms and antibiotics of the most important childhood infections.

Overall, this is a very good introductory textbook for pediatric junior house staff and medical students. It is well organized, easy to read, and an excellent support for core lectures given in an academic setting. In a world of expensive texts, this is a good buy for the price of $30.75. ☐ Jane Ellen Aronson, DO

CORONARY ANGIOPLASTY

Sheldon Goldberg, MD. The objective of this book is to provide a comprehensive understanding of percutaneous transluminal coronary angioplasty (PTCA). There are 26 contributors from 13 university medical centers. The contents are divided into three parts. Part one reviews developmental background, technique, adjunctive pharmacologic treatment, and protection of ischemic myocardium during PTCA. Part two discusses PTCA in specific clinical populations including multivessel coronary artery disease following coronary artery bypass surgery, unstable angina, acute myocardial infarction, vasospastic angina, total coronary artery occlusion, and in the high-risk patient. A chapter on peripheral and coronary applications of laser angioplasty is included. Part three deals with the complications and results of PTCA. There are excellent discussions on how best to monitor the post-PTCA patient and on the continued high incidence of restenosis. The last chapter in the book deals with the issue of PTCA versus coronary bypass surgery. The authors of this chapter are surgeons, but present a very balanced viewpoint on clinical decision making for various subsets of patients along with multiple citations to support their conclusions. Missing from this excellent chapter is any discussion referable to the significant group of patients who may require multiple diagnostic and PTCA procedures over the same time period that a single left internal mammary artery graft to the left anterior descending coronary artery with or without an additional single vein graft to another vessel (single or two-vessel CAD) would have lasted. Even if the economic factors still were to favor PTCA, does one defend the multiple assaults upon the psyche and emotional well-being of the patient compared with a single surgical procedure and recovery? Will newer procedures such as lasers, stents, cutters, drills, or grinders provide greater long-term success rates? On the technical side, the book is very readable. There is a large bibliography demonstrating the broad base of knowledge to support the stated facts and opinions. The illustrations are of high quality with good reproductions. Legends for figures and tables are properly supportive. I highly recommend this book for anyone wishing to review the subject of PTCA and its current role in clinical medicine. ☐ Robert M. MacMillan, MD

INFLAMMATION: BASIC PRINCIPLES AND CLINICAL CORRELATES

JI Gallin, IM Goldstein, RO Snyderman (eds). New York, NY, Raven Press, 1988. This 1,000-page text is solely dedicated to the advances in the understanding of inflammation as the predominant problem associated with many clinical syndromes seen in the daily practice of physicians. Obviously, "at the bottom" of any inflammatory reaction are the interactions of the immune system and the mediators they release that can act as specialized hormones on the immune system itself or other organs, i.e. cytokines, or various agents that interact with other organ systems, e.g. leukotrienes, prostaglandins, histamines. The editors have gathered the experience of an excellent group of clinician-scientists in order to deliver the expanse of information available. Of special interest is the section devoted to clinical correlates and specific entities that now are recognized as inflammatory, e.g. asthma, adult respiratory distress syndrome, vasculitis. In addition, a separate section has been dedicated to the pharmacologic modulation of inflammation that is an excellent resource for individuals searching for a better understanding of this area. ☐ Leonard Bielory, MD

MRI OF THE MUSCULOSKELETAL SYSTEM. A TEACHING FILE

Jerrold Mink, MD. New York, NY, Raven Press, 1990. The contributors to this book succeed in their goal of presenting a comprehensive musculoskeletal magnetic resonance overview. The volume is organized in a text-atlas format, with liberal use of scans and extensive discussions. The first section illustrates the physical basis of magnetic resonance scanning. The remainder of the text addresses the musculoskeletal system, including the spine, shoulder, knee, wrist, foot, and temporomandibular joint. The beginning of each chapter includes a technical treatment with attention to patient positioning and scanning parameters. The case studies that follow contain history, scan interpretation, and discussion. The images are of a high quality with ample use of plain films and computed tomography scans. Overall, the contributors should be commended for constructing a well-written, educational text with state-of-the-art scans. ☐ Neil B. Horner, MD

Health Access New Jersey

Position of the Medical Society of New Jersey

New Jersey is the most densely populated state in the nation. The standard of income and sophistication of our residents ranks among the top three states. Our health care system is among the finest. We have over 100 acute care hospitals, and our hospitals average over 300 acute care beds. For the most part, access to care is equitable throughout the state.

The University of Medicine and Dentistry of New Jersey is a nationally recognized medical school. Most areas of our state are within 30 minutes drive of major hospital and physician facilities. New Jersey residents have a variety of choices and immediate access to advanced technology and the finest clinicians in the world.

Beyond our technical capacities is an element of humane concern for all people, and a desire to assure that everyone has access to the health care they need. In New Jersey, medical indigents as well as Medicaid patients have the same access to doctors and hospitals as the insured patient. Over $600 million yearly of hospital indigent patient services are funded by a surcharge on health insurers, while an additional $300 to $500 million of physician services are provided voluntarily, without compensation, by the doctors of New Jersey.

It has been difficult, and is becoming more difficult, for the state and federal governments to properly fund Medicaid, and for providers to deliver care to the uninsured. The current program is institutionally focused and is very expensive, lacking continuity of care, preventive medicine, and the dignity of delivery that our citizens deserve. It is possible that the current $2 billion operating budget can be redirected to enhance both the quality and quantity of services so that hospitals are not used as physicians' offices.

Such a revision would place the Medicaid patient into the mainstream of health care. This would maximize efficiency and permit hospitals to concentrate on those patients whose severity of illness warrants hospital-based care.

Given the background of our environment, it is necessary to note that our current delivery systems, both ambulatory and inpatient, provide consistently high quality and reasonably priced services. A recent study by New Jersey Citizens' Action revealed that the average United States citizen spends $2,251 yearly for health care, while New Jersey residents spend $1,643. New Jersey, therefore, is significantly below the national average, and only marginally ahead of the Canadian average of $1,515 per person. Economic factors, the complexity of society, and concern for the treatment environment differ dramatically between Canada and New Jersey, so the relative parity of these cost figures is remarkable.

While our system has done well, it is under stress. Care for the uninsured and the Medicaid patient must be funded in a more stable and equitable fashion. New Jersey citizens must be assured of access to care in an environment acceptable to patients, physicians, and hospitals. Physicians and hospitals must be allowed to function in an environment that permits professional freedom while requiring public accountability.

HEALTH ACCESS NEW JERSEY

The major thrust of the Medical Society of New Jersey and the physicians it represents is to search for ways to expand access to care for those persons in New Jersey who have no

Table. ***Health Cost Data—New Jersey.***

$ 650 million	Uncompensated Hospital Care
$ 300-500 million	Uncompensated Physician Care
$ 150 million	Under-reimbursed Physician Care in Medicaid
$ 400 million	Hospital and Doctor Malpractice Premiums
$ 2 million	Auto Surcharge—Doctors
$ 2.5 million	Auto Surcharge—Medical Inter-Insurance Exchange of New Jersey
$ 2.5 million	Auto Surcharge—Princeton
$ 250 million	Medicare Undercompensation of Doctors
$ 1.757 billion	
$ 1 billion	(Estimated Defensive Medicine Cost)
$ 2.757 billion	Total
$ 5 million	Malpractice Surcharge—State JUA
$ 2.762 billion	

Conclusion: There are $2.762 billion being added to the cost of health care in New Jersey related to governmental policies that force cost shifts to private patients, and the failure of government to address professional liability reform.

insurance or who lack adequate health insurance coverage, while seeking ways to reduce the spiraling cost of health care.

It is clear that some segments of our system in New Jersey need major restructuring. This restructuring needs to be accomplished in a manner that does not jeopardize access to quality care or strong aspects of our current system.

Health Access New Jersey presents a challenge to governmental forces in the state. The challenge is whether this administration is willing to pay for access to care for all those who cannot provide it for themselves. Certain priorities must be considered:

1. Revenues may have to be transferred between or among current programs.
2. New sources of revenue may have to be found.
3. Public support for legislation necessary to bring about concrete changes will have to be developed.

There is a need for statewide dialogue to address these changes and critical issues. The problems facing the New Jersey health care system cannot be solved by any one group—government or the private sector. A collaborative process should be pursued, with government and medicine working together for the best interests of our citizens.

Certain conceptual elements must become governmental policy goals. These include:

1. Ensure that most patients have the ability to choose the physicians, hospitals, and systems of health care that they want and with which they are comfortable.
2. Create incentives to make available new technology.
3. Sustain a medical education system that seeks to attract the best and brightest students, leading them into a rigorous and comprehensive learning process that will assure the public of well-trained physicians in the future.
4. Nurture professional ethics, prudent judgment, and professional freedom in the delivery of health care to the citizens of New Jersey.
5. Take steps to reduce the reasons creating the need for physicians to practice defensive medicine.

HEALTH ACCESS PLAN—NEW JERSEY

To accomplish Health Access New Jersey, several specific activities are needed.

Role of Government

A. Increase access to care by enacting major Medicaid reforms. It is distressing that Medicaid is so abysmal. New Jersey should assure that all persons of low and poverty income levels are eligible for adequate benefits so that this group is not left without access to needed health care. Perhaps a Medicaid eligibility standard of 185 percent of the federal poverty level could be a goal that will allow for coverage of most uninsured. All basic medical benefits must be covered. There should be no rationing of care nor skimping of funds. Physicians and hospitals should be paid fairly for services rendered to Medicaid patients, at least at the same rate the federal government pays for Medicare patients.

B. Create a state-operated health insurance pool for small employers similar to the state-operated insurance mechanism for temporary disability benefits. The thousands of small employers and their employees would comprise an underwriting pool of tens of thousands that could be effectively and efficiently insured.

C. Increase access to care by creating state level risk pools that would make available coverage for those who are unable to obtain affordable health care insurance. These pools would ensure that no one in New Jersey would be denied health care insurance because of a particular health condition. They also would guarantee continued health care coverage when persons are changing jobs.

D. Reduce health care costs through professional liability reform. This would reduce the practice of defensive medicine. It is estimated that defensive medicine adds approximately 15 to 25 percent to the total health bill. There are estimates that defensive medicine may approach $20 to $30 billion yearly in the United States, and perhaps more than $1 billion per year in New Jersey. Reform should be designed to lower frequency and severity of speculative litigation, while preserving the rights of injured patients.

Areas for a legislative approach include: require a certificate of merit as a prerequisite to file a liability case; adoption of basic medical expert witness criteria; limitation of $250,000 on recovery of noneconomic damages; periodic payment of future awards for damages; and declaring a definite statute of limitations.

E. Develop professional practice parameters to help assure that only high-quality appropriate medical services are provided. This will impact favorably on quality and cost of medical care. Such parameters would be professionally developed strategies for patient care, developed to assist physicians in clinical decision making.

F. Urge more state, federal, and medical school support for medical education and research. We must increase state grants/scholarships to ease the widespread anxiety among medical students about their ability to finance their medical education. The accumulated debt of many students is overwhelming, and this is due largely to the fact that many students come from middle-to-low income families who cannot make substantial financial contributions to the education of their children.

G. We can reduce health care costs by reducing the administrative cost of health care delivery and excessive paperwork forced onto patients, their families, and their physicians. The frustrations of physicians in dealing with differing managed care requirements of multiple insurance companies and government programs result in increased office costs and interference with the physician/patient relationship.

Role of the Medical Community

A. Encourage health promotion and disease prevention, including healthier lifestyles. We must promote programs that will eliminate smoking, decrease alcoholism and drug abuse, reduce cholesterol, encourage better adolescent health practices, and decrease the spread of AIDS.

B. Encourage physicians to practice with the highest ethical standards. We should encourage all physicians to treat their patients as individuals; to use the best possible judgment in every case regarding quality of care; to inform patients (when possible) of the usual risks, complications, and alternatives regarding health care, and the costs of such care; to treat patients with courtesy, dignity, respect, compassion, and attention; and to overcome bias in the treatment of AIDS patients.

C. Develop standard practice parameters for all specialties of medical practice.

SPECIAL PROBLEMS

A. *Uncompensated Care.*

1. Increase the Medicaid eligibility levels to 185 percent of the federal poverty level so that more persons are covered under Medicaid.
2. Provide state-operated insurance pools so all employers can participate.
3. Eliminating the usual "pre-existing loss" requirement and the waiting period required by insurance companies would allow persons to have continued health care coverage when changing jobs.

B. *Certificate of Need.*

The Certificate of Need program (CON) should be re-evaluated. Our state has a hospital rate-setting mechanism that makes the CON program in its present form obsolete. Nationally, at least 12 other states have repealed their CON legislation as they developed rate-setting mechanisms. If, however, the state wishes to continue the program, modifications should be studied. Among the points to be considered are: removing the requirement of a CON for diagnostic technology; and in the alternative, raise the entry level for CONs from the current base of $400,000 cost factor to $2 million.

There has been considerable speculation that the governor and the Commission believe that the CON must be extended to physicians to create a level playing field. While MSNJ does not agree with that goal, it understands but does not believe it can be practically or equitably achieved. Hospitals are multimillion dollar corporate conglomerates. They employ hundreds of people and retain batteries of lawyers, accountants, and financial advisers. The current CON system is dominated by hospital interests. Most of the persons in the approval cycle either are directly or indirectly (but very significantly) connected to hospitals.

Certificate of need extension to physician offices clearly interferes with the physicians' ability to exercise their legally franchised right to practice what they in fact have been trained to do. As an example, the radiologist is trained and licensed to practice radiologic services, that may include all forms of imaging. Forcing such a physician to obtain a CON to practice his specialty in a private office setting is an improper intrusion and restriction of the physician's right to practice what he has been licensed to perform.

Further, the restrictive CON process now in place, particularly as it applies to diagnostic services, has fostered the proliferation of private imaging services because of demands for access to such services and the limited access in hospital settings.

Therefore, in the context of a CON for physicians in New Jersey, the following concerns must be addressed:

> There must be careful consideration as to when a CON is required. Everything that a doctor does in his office also is done by doctors in hospitals. The point of attachment needs to be selected with such concern so that it does not destroy the opportunity for the private practice of medicine, if we are to avoid a monolithic system.
>
> The decisional apparatus must be patently objective and cannot demonstrate the slightest appearance of impropriety. The current CON apparatus does not meet this test. Hospital interests are evident and controlling. Decisions will need to be insulated from undue influence, and those making the decisions cannot have a direct or indirect interest in the outcome. It is difficult to envision how the current composition of either the SHCC or the HCAB can meet the test of objectivity required. Either a new format or a reconstituted SHCC and/or HCAB must be used, with the appointees being full-time governmental employees (other than those whose duties involve operating hospitals).
>
> Physicians must be granted fair, nondiscriminatory, and equal access to controlled technology. If the state is to apply CONs to the physician community, then the recipient of CONs must be required to permit all physicians within the defined geographic region access to the equipment. If the equipment requires specialty designation or skills, it would be appropriate to require that physicians applying for "use" privileges demonstrate their qualifications.
>
> Application of current reimbursement rules that apply to hospitals granted a CON, that include extraordinary rate relief when the hospital faces bankruptcy in the operation of its services, must be extended to physicians who are subject to the CON process.

In summary, the CON process neither has contained costs nor produced maximum utilization of available health dollars. The CON system has been used to direct sophisticated technology to failing urban hospitals in an effort to stabilize their poor financial positions. This activity neither is compatible nor consistent with natural market forces. It has not been successful and is not likely to be successful.

Rather than focus on the CON as a planning method, the state should re-evaluate the concept and consider using a strategic planning model in its place.

C. *DRGs.* This system of payment to hospitals has proved to be inadequate and expensive, and should be eliminated. The federal government reportedly will be abandoning it in the next several years. Other states have more efficient and effective methods to finance hospital care than New Jersey. A study presented to the New Jersey State Department of Health several years ago indicated that the "Share" system was just as effective and less expensive to manage in New Jersey.

A system is needed which is truly prospective and permits rapid decision making on the rate-setting process. Hospitals should not be penalized for making rate review requests. However, the system should truly reward those hospitals that operate efficiently and penalize those that do not.

D. *Medicaid.* The Medicaid program in New Jersey has not provided quality care on a routine basis to recipients. The provider fee schedule is woefully substandard, and the federal Health Care Financing Administration has notified the state government that because of low provider reimbursement and its adverse impact on participation, the program is dangerously close to a declaration of noncompliance.

State administrators have not recognized the flawed approach of the substandard fee schedule and have not corrected it. Instead, they have concentrated for over five years on a managed care or HMO concept that has not been accepted by Medicaid patients or health care providers. What the Medicaid administrators have not recognized is that managed care is not a broad spectrum solution. It will only succeed when there are highly motivated patients, and highly motivated physicians.

The best course for Medicaid is a multifaceted system. A viable fee-for-service program must be offered and does have a place. Fee for service has never been given a chance, and it clearly deserves an opportunity to succeed.

Fee for service with realistic utilization controls provides cost effective, high-quality services and assures access.

Managed care is not a panacea. In those instances where it is used, it must be monitored to assure that underutilization, lack of access, and loss of quality are not occurring.

E. *Physician Self-Referral to Diagnostic Services.* Physician self-referral to diagnostic services in which they hold an economic interest is an important issue being studied on both the state and federal levels.

Certainly if a service is considered essential to a physician's specialty, it should be available through the physician. Cardiologists, for example, must have immediate access to x-ray, EKGs, and certain laboratory tests. Orthopaedists and physiatrists must have x-ray capability, and frequently do and should provide physical therapy, on site, under direct supervision. These instances are not all inclusive, but do demonstrate high-quality, cost-effective medicine.

Physician referrals to diagnostic centers in which they have an interest should be governed by advance disclosures to the patient with an option for the patient to go elsewhere. Hospital staff appointments are of significant economic interest to physicians. Physician referrals to the hospitals where they hold privileges are also subject to potential abuse, and must be carefully monitored.

F. *Medicare Mandated Assignment.* One of the major reasons for the rise in the cost of care is that the group of patients paying for services at regular rates is decreasing in ratio to the indigent, and those covered by Medicare and Medicaid. Senior citizens have pressed for mandatory assignment. Many seniors have significant incomes and assets. It is unfair to the nongovernment program patient to limit the liability of seniors who are well-off. A senior with a $25,000 annual income is far better off than a family of four with an income of $30,000.

Mandated assignment is unnecessary in light of federal law which limits balance billings to the federally approved MAAC level. That level has consistently declined, and will be further reduced on January 1, 1991.

SUMMARY

We feel these proposals will strengthen the New Jersey health care system. They present an enormous challenge for this administration and to all concerned. We welcome and encourage your support, and anticipate a long-term close relationship between government and physicians, hopefully working together to bring about the best possible health care to all the citizens of New Jersey. ■

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Legal Implications of Routine Screening

for Asymptomatic Silent Myocardial Ischemia

LEON G. SMITH, MD
RICHARD E. BRENNAN, ESQ
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A recent case in California raises legitimate concern about the risks of a lawsuit arising out of a routine physical examination. This ruling has an ominous portent for many physicians who either are not current or are not comfortable with the available testing procedures for screening asymptomatic patients for silent myocardial ischemia.

A case in California raises legitimate concern about the risks of a lawsuit arising out of a routine physical examination. A 40-year-old white asymptomatic male underwent an annual physical examination that essentially was unremarkable except his cholesterol was elevated at 250 mg/dL with a high-density lipoprotein level considered to be borderline low. His resting electrocardiogram (ECG) was interpreted as normal and his blood pressure was 140/90; he smoked two packs of cigarettes per day and had a positive family history of acute myocardial infarction. The physician instructed the patient to lose weight, eat less red meat, and exercise more. One month later, the patient died suddenly of a myocardial infarction. An autopsy revealed advanced triple-vessel coronary artery disease with a fresh thrombotic occlusion of the right coronary artery.[1]

An arbitration panel in California awarded the patient's family a $500,000 malpractice judgment, ruling that because of the presence of multiple risk factors for coronary artery disease, even in the absence of angina or prior myocardial infarction, an exercise stress test should have been performed. In short, the arbitration panel held that the physician simply did not go far enough to rule out silent myocardial ischemia (SMI).

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This decision has been criticized in the medical field as a usurpation of community standards.[2] In terms of its legal implications, the ruling undoubtedly has an ominous portent for many physicians who either are not current or are not comfortable with the available testing procedures for screening asymptomatic patients for SMI.

"Silent" ischemia was recognized more than a half century ago. Recently, however, considerable attention has been given to this potentially lethal disease. Defined as objective evidence of myocardial ischemia in the absence of angina or equivalent symptoms,[3] SMI is a common occurrence in all forms of coronary artery disease (CAD). Since 1981, patients with SMI have been classified into three clinical types: type 1 persons who are totally asymptomatic, never having had any signs or symptoms of CAD; type 2 persons who are asymptomatic after a myocardial infarction; and type 3 persons who demonstrate both symptomatic and asymptomatic episodes.[3] Sudden death has been associated with type 1 SMI—per year in the United States, approximately 50,000 of 250,000 sudden death victims have no history of heart disease, yet autopsies throughout the country reveal advanced arteriosclerotic cardiovascular disease and scars in their myocardium.[4]

SMI poses serious management problems for the physician attempting to screen asymptomatic patients. Preventive measures virtually are nonexistent and screening techniques yield less than perfect results. In addition, the physician is confronted with underlying cost-effectiveness concerns associated with administering a battery of tests that may prove unnecessary.

SMI poses serious management problems for the physician attempting to screen asymptomatic patients. Preventive measures virtually are nonexistent[3] and screening techniques yield less than perfect results. In addition, the physician is confronted with underlying cost-effectiveness concerns associated with administering a battery of tests that, for many patients, may prove unnecessary.

Although there are varying reports in the literature regarding the appropriate evaluation of the asymptomatic patient with risk factors, it generally is agreed that SMI can be discovered during exercise stress testing or Holter monitoring, despite the low predictive value and the high risk of false positive results of such procedures. Some literature, however, suggests that the diagnostic value of Holter monitoring has been enhanced by technologic refinements and the development of appropriate testing protocols,[4] although it appears a screening test that is 100 percent sensitive and specific has yet to be developed. Given this element of uncertainty and the fact many patients fall within the type I classification, physicians increasingly are recognizing the necessity as well as the difficulty of screening for asymptomatic-risk patients. Nevertheless, where improvements are recognized in diagnostic procedures that readily are available, it is incumbent upon the physician, as a precautionary measure for the physician as well as the patient, to require the patient undergo tests; anything less may be deemed malpactice.

Generally, a physician is held to a reasonable standard of care. The physician who fails to exercise the degree of care, knowledge, and skill ordinarily possessed and exercised in similar situations by the average member of the profession in the field is guilty of professional negligence or malpractice if the deviation of the standard of care results in the patient's death.[5] Moreover, the duty to use care extends to a physician, who in the exercise of his profession examines a person at the request of an employer, regardless of whether a physician-patient relationship exists.[6]

The decision to screen a patient for SMI requires the exercise of reasonable prudence on the part of the physician. A review of relevant case law indicates that in view of the availability of screening techniques and their general acceptance as diagnostic tools, reasonable prudence will require the physician to have the high-risk cardiac patient undergo more than just an ECG. Moreover, that reasonable prudence may at times require the physician to order a series of seemingly unnecessary tests as a precautionary measure is not a new concept in the law. In fact, over 50 years ago a court went so far as to state that with respect to reasonable prudence "there are precautions so imperative that even their universal disregard will not excuse their omission."[7]

An example of such imperative precautionary measures can be seen in an opinion entitled Helling versus Carey: A 32-year-old women sued two ophthalmologists for failure to diagnose glaucoma by means of a pressure test. Medical experts for the patient and the physician testified that the standards of ophthalmology under the same or similar circumstances did not require routine pressure tests for patients under 40 years of age because the occurrence of the disease in that age group was a rarity. The court, however, held that even though they did not violate the standard of care existing within their profession, under the facts of this unique case, the ophthalmologists were negligent in their failure to give the pressure test to the patient under 40 years of age. In a later case, Gates versus Jensen, the court held that where a glaucoma pressure test proved inconclusive in a high-risk patient, reasonable prudence required the ophthalmologist to perform alternative diagnostic tests.[9]

In the 1970s, courts began to rule that physicians' failures to inform pregnant women of the availability of the relatively new prenatal diagnostic procedure known as amniocentesis constituted a deviation from accepted medical standards.[10] More recently, a federal court found negligence where treating physicians failed to conduct tomograms to diagnose osteomyelitis.[11]

The physician's failure to utilize generally accepted diagnostic aids will be deemed a violation of the applicable standard of care. A medical malpractice treatise written over 20 years ago indicated that failure to take an ECG did not constitute negligence.[12] In the early 1970s, however, the ECG emerged as part of the usual diagnostic procedure.[13]

In determining whether a physician has breached the duty of care owed to the cardiac patient, courts will consider advances in the profession, as well as all the medical resources and facilities available, such as radionuclide imaging techniques, stress testing, and ambulatory ECG monitoring. While this may be perceived as heightening the requisite standard of care, in a broader sense it sets a standard no higher than that applied to other practitioners under similar circumstances.[14] Furthermore, because of the improved quality of medical training, the modernization of communication and transportation, the proliferation of medical literature, the scheduling of seminars and conferences on a variety of medical subjects, the growing availability of modern clinical facilities, and the standardization of medical schools through a national accrediting system, the majority of courts long have discarded the locality rule,[15] opting instead for application of a regional or national standard of care.

Moreover, a physician will not be held liable for an honest error in diagnosis or in judgment, provided the physician has brought the requisite degree of care and skill to the patient.[16] Given the complexities of CAD, a physician may successfully defend a malpractice action if the plaintiff is unable to show that a correct diagnosis would have prevented a myocardial infarction or that it would have increased the chances of survival. It is, however, essential that a physician be able to articulate the reasons for the course of action taken and that these reasons be grounded in common sense and logic. If a physician is to err, it is best to do so on the side of caution.[12]

It especially is important for physicians to realize that upgrading of technological diagnostic tools will invariably redefine the standard of care. As the combination of procedures such as radionuclide imaging techniques, stress testing, and ambulatory ECG monitoring become regarded as acceptable possible aids for diagnosis of silent myocardial ischemia, particularly in men over 40 with one or more coronary risk factors, the result is an expansion of the physician's duty within the applicable standard of care. In terms of legal objectives and preventive measures against malpractice, physicians can be guided by the emerging clinical goals that seek to establish the presence and severity of SMI and to guide its treatment: namely, awareness of the possibility of silent myocardial ischemia and the use of commonly available tests.[17] ■

REFERENCES

1. Fuerst M: Silent ischemia: Lawsuit could mandate screening. *Med World News* 28:19, 1988.
2. Assey ME: Screening for silent myocardial ischemia. *Am Fam Physician* 38:143-146, 1988.
3. Cohn PF: Silent myocardial ischemia—classification and management. *Hosp Pract* 25:45-50, 1990.
4. Cohn PF: Silent myocardial ischemia. *Ann Intern Med* 109:312-317, 1988.
5. Walck versus Johns-Manville Products Corp., 56 N.J. 533, 267 A.2d 508 (1970).
6. Beadling versus Sirotta, 41 N.J. 555, 197 A.2d 857 (1964).
7. The T.J. Hooper, 60 F.2d 737, 740 (2d Cir. 1932).
8. 83 Wash. 2d 514, 519 P.2d 981 (1974).
9. 92 Wash. 2d 246, 595 P.2d 919 (1979).
10. Berman versus Allan, 80 N.J. 421, 404 A.2d 8 (1979).
11. Sewell versus United States, 629 F. Supp. 448 (W.D. La. 1986).
12. Sagall EL, Reed BC: *The Heart and the Law.* Chapter 5, §7 (1968).
13. Harney DM, Medical Malpractice §9.3(C) (1973); Walck versus Johns-Manville Products Corp., 56 N.J. 533, 267 A.2d 509 (1970).
14. Zaremski MJ, Goldstein LS, 2 Med. & Hosp. Neg. §25:12 (Callaghan 1988).
15. Shilkret versus Annapolis Hospital, 276 Md. 187, 349 A.2d 245 (1975).
16. Schueler versus Strelinger, 43 N.J. 330, 204 A.2d 577 (1964).
17. Moskowitz RM, Chatterjee K, Parmley WN: Silent myocardial ischemia: An update. *Med Clin North Am* 72:1033-1054, 1988.

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Carotid Endarterectomy

Under Local Anesthesia

KENNETH S. FRIED, MD
STEVEN M. ELIAS, MD
ROBERT RAGGI, MD

Carotid endarterectomy has been used increasingly in the management of cerebrovascular disease. However, morbidity and mortality statistics for this procedure have caused criticism. The authors believe neurologic and medical complications can be reduced with the use of regional anesthesia for carotid endarterectomy.

Carotid endarterectomy, the second most common vascular operation performed in the United States, is utilized in the prevention of transient ischemic attacks and strokes originating from arteriosclerotic disease at the carotid bifurcation. However, its efficacy recently has come under scrutiny in the medical literature and by the public. The procedure remains controversial for two major reasons: indications for the operation continuously are being redefined, and the major complication of the surgery, permanent dysfunction of the ipsilateral cerebral hemisphere, is exactly what the procedure attempts to prevent. Because stroke is such a devastating event, it is imperative that vascular surgeons maintain a neurologic morbidity considerably below that representative of the disease's natural history. In addition, most of the patients undergoing carotid endarterectomy have significant cardiac disease and are at risk for related morbidity when subjected to this operation. We believe that with carotid endarterectomy performed under regional anesthesia in the fully conscious patient, neurologic and associated medical complications can be reduced significantly. At New York University, this approach has been utilized in over

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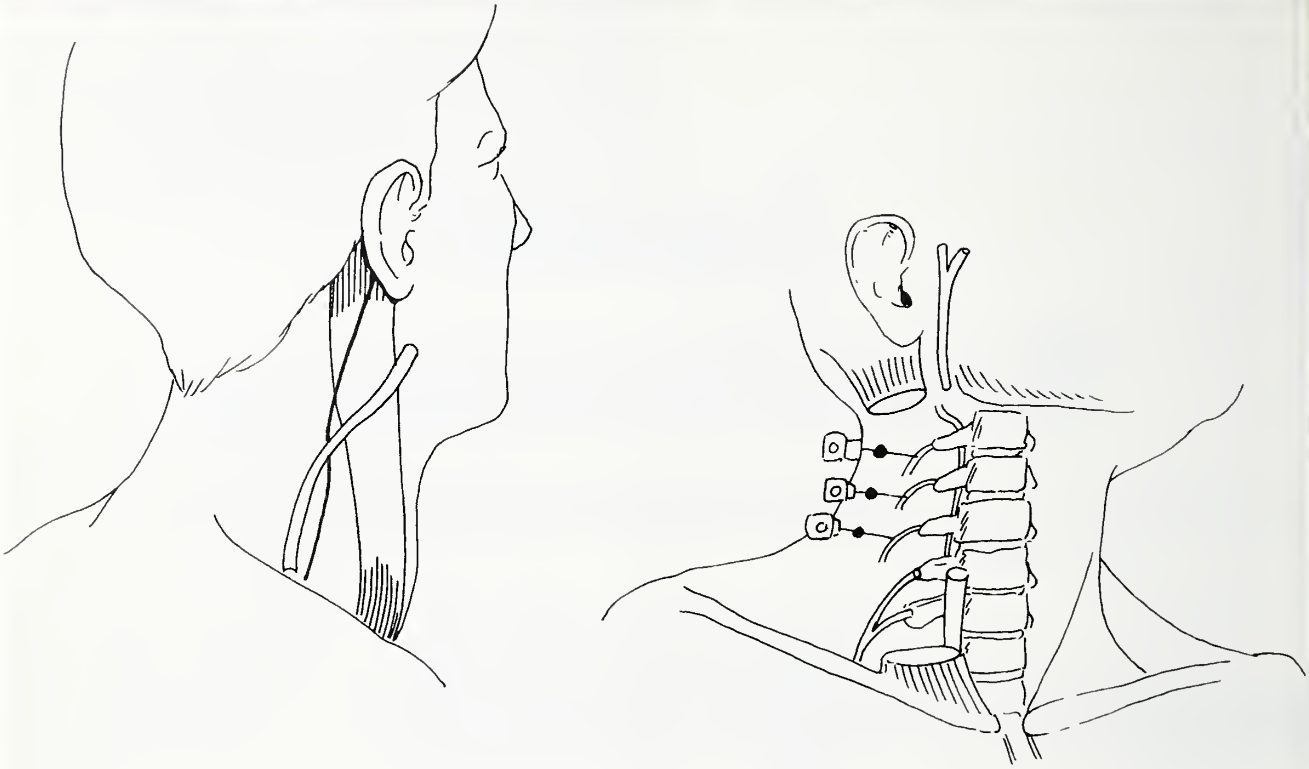

Figure. Carotid endarterectomy. © Frank Cecala

90 percent of 1,500 carotid endarterectomies.[1] Other researchers have reported similar large experiences with excellent results using local or regional anesthesia.[2,3]

TECHNIQUE

Anesthesia consists of a superficial and deep cervical block. A toy squeaker, held by the patient in the contralateral hand, is used to monitor cerebral circulation.[4] A test occlusion of 60 seconds' duration determines the need for an indwelling shunt. The internal carotid artery (ICA) is clamped first to minimize the possibility of plaque dislodgement into the ICA circulation. During this time, as well as earlier when the vessels initially are exposed, the patient is observed for changes in cerebral function manifested by loss of consciousness, the appearance of focal neurologic deficits, or the inability to continue to squeak the toy in the contralateral hand. If the test occlusion is well tolerated, the physician proceeds with the endarterectomy while the anesthesiologist continues to reassess the patient's neurologic status.

METHODS

We present a series of patients from Englewood Hospital, with successful carotid arterial reconstruction with regional anesthesia. Over a two-year period, 20 carotid endarterectomies were performed utilizing this technique. An increased interest in regional anesthesia within the Department of Anesthesia helped to employ this approach. In the small group of patients, no neurologic morbidity, no local problems secondary to the technique, and no associated medical complications occurred. Two patients (10 percent) required subsequent placement of intraluminal shunts without resort to induction of general anesthesia.

Under general anesthesia, cerebral function must be monitored directly by electroencephalogram (EEG)[5] or indirectly using another index of cerebral perfusion such as ICA stump pressure.[6] Approximately 20 percent of patients undergoing surgery will require shunting to preserve neurologic function, slightly more in the presence of contralateral occlusion.[1,7] The different monitoring modalities attempt to identify these patients without allowing any deficits to occur because of imprecise calculations.

EEG generally is considered too sensitive to use and is better for assessment of global rather than regional ischemia, the major concern during carotid endarterectomy.[8] Inaccurate readings may occur with changes in anesthetic depth or with changes in $PACO_2$. In addition, all inhalation agents cause dose-dependent increase latency in waveform, thus obscuring real ischemic changes. In carotid endarterectomy opposite a contralateral occlusion, approximately 50 percent of patients develop an abnormal EEG mandating shunt placement.[9] In a similar study in conscious patients, only 15 to 20 percent of patients required shunt placement.[10] Clearly, many of the patients did not require a shunt and could have avoided the possible morbidity associated with its use.

Carotid stump pressure measurements have failed to provide reliable criteria for the need for shunting.[11] Ostensibly, they reflect contralateral blood flow to the ipsilateral hemisphere. However, pressure studies are not always a valid index of cerebral perfusion or flow. The previously accepted level of 50 mm/Hg has proved to be unreliable.[11] In awake patients undergoing the procedure, several patients with higher pressures did not remain conscious when these measurements were taken.

As a consequence, many vascular surgeons recommend routine shunting although 5 percent may fail to function due to atherosclerosis or thrombosis of the common carotid artery. Longer periods of ischemia associated with higher dissection to facilitate placement may not be tolerated, and, worse still, this fact will not be recognized perioperatively under general anesthesia. Safe clamping time varies depending on collateral circulation; it is believed that irreversible neurologic defects may develop in under two minutes. Embolism also may occur during insertion. These potential problems argue against routine shunting, a necessity if EEG or stump pressures are not reliable.[1]

DISCUSSION

Neurologic morbidity in patients intact preoperatively ranges from 2 to 5 percent, though much higher rates have been reported in other subgroups. A report from Karmody and colleagues showed a statistically significant difference in neurologic complications between regional and general anesthesia, 0.6 percent versus 4 percent.[12] Further, randomized studies will be necessary. Regardless, complications related to use of intraluminal shunts can be effectively reduced in the awake patient by allowing most operations to be completed safely without shunts.

Non-neurologic morbidity is significantly greater under general anesthesia,[7] 2.8 percent versus 12.9 percent. Complications either are pulmonary or cardiac; myocardial infarction and congestive heart failure (CHF) are the most prevalent complications. Regional anesthesia leads to a lower morbidity by limiting blood pressure swings and the need for vasoactive drugs.

Carotid endarterectomy with regional anesthesia is well tolerated by the patient; it is safe and reliable. The major advantage of the procedure is that it allows direct monitoring of cerebral function in the conscious patient. Deficits can be identified and corrected immediately.

CONCLUSION

Despite reports showing excellent results with carotid endarterectomy performed in community hospitals, fewer patients currently are being referred for this procedure.[13] Perhaps, with local or regional anesthesia available as an option, patients with appropriate indications more readily will be offered surgery. We believe regional block is the technique of preference in the high-risk patient and should be strongly considered for all patients undergoing this procedure. ■

REFERENCES

1. Imperato A, Riles T, Ramirez A: Cerebral protection in carotid surgery. *Arch Surg* 117:1073-1078, 1982.
2. Hafner CD, Evans WE: Carotid endarterectomy with local anesthesia: Results and advantages. *J Vasc Surg* 7:232-239, 1988.
3. Slutzki S, Behar M, Negri M, et al.: Carotid endarterectomy under local anesthesia supplemented with neuroleptic analgesia. *Surg Gynecol Obstet* 170:141-144, 1990.
4. Spielberger L, Turndorf H, Imperato A: Handheld toy squeaker during carotid endarterectomy in the awake patient. *Arch Surg* 114:103-104, 1979.
5. Baker JD, Gluecklich B, Watson CW, et al.: An evaluation of EEG monitoring for carotid surgery. *Surg* 78:787-792, 1975.
6. Crawford ES, Debakey ME, Blaisdel FW, et al.: Hemodynamic alterations in patients with cerebral arterial insufficiency before and after operation. *Surgery* 48:76-81, 1960.
7. Peltzman AB, Webster MW, et al.: Carotid endarterectomy under regional anesthesia. *Ann Surg* 117:59-62, 1982.
8. Evans WE, Hayes JP, Waltke EA, et al.: Optimal cerebral monitoring during carotid endarterectomy: Neurologic response under regional anesthesia. *J Vasc Surg* 2:775-777, 1985.
9. Phillips MR, Johnson WG, Scott M: Carotid endarterectomy in the presence of contralateral carotid occlusion. *Arch Surg* 114:1232-1239, 1979.
10. Riles TS, Imperato AM, Kopelman J: Carotid stenosis with contralateral internal carotid artery occlusion. Long-term results in 54 patients. *Surgery* 87:363-368, 1980.
11. Hobson RW, Wright, CB, Siblett JW, et al.: Carotid artery back pressure and endarterectomy under regional anesthesia. *Arch Surg* 109:682-687, 1974.
12. Corson JD, Chang BB, Karmody AM: The influence of anesthetic choice on carotid endarterectomy outcome. *Arch Surg* 122:807-812, 1987.
13. Kirshner DL, O'Brien MS, Ricotta JJ: Risk factors in a community experience with carotid endarterectomy. *J Vasc Surg* 10:178-186, 1989.

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Maintaining an Office Laboratory

KATHLEEN L. VOLDISH, CLA (ASCP)

The author discusses the need to have a complete, up-to-date procedure manual available at all times; information on ways to investigate reference laboratories is included.

LABORATORY PROCEDURE MANUAL

Question: We are interested in developing a procedure manual for tests performed in an office laboratory. What should be included in these procedures?

Answer: A written procedure manual, for use by all personnel performing laboratory procedures, is one way to enhance performance in the office laboratory. These test procedures should include patient preparation, specific instructions, such as fasting and special diet, specimen collection, including anticoagulants or other preservatives, and any other special instructions or processing, such as special timing considerations. In addition to the detailed procedure (step-by-step directions), instructions should be given on how to prepare all reagents, standards, and controls. This should include any safety information associated with the reagents, controls, or instrumentation. Instrumentation maintenance and frequency of calibration should be defined.

The procedure manual should describe how results are derived, any necessary calculations (a precise example is beneficial), units for reporting the results, and the range of linearity. Any actions required when results exceed the tolerance limits should be defined. Reference ranges along with critical values and limitations of the method, e.g. interfering substances, should be noted. Describe acceptable alternative procedures.

Manufacturer product inserts may be used to supplement the written procedure but must not take the place of a precise manual. If used as a supplement, inserts must be checked frequently for changes by the manufacturer.

Changes or corrections to individual pages should be dated and noted on a review page. Periodically, all personnel performing testing should review each procedure, which should be documented on completion by initialing and dating a review page.

The National Committee for Clinical Laboratory Standards published *Guidelines for Clinical Laboratory Procedure Manuals,* Volume 4, Number 2, detailing each of the areas to be included in a procedure.

While writing procedures can be time consuming, it is good laboratory practice to have individualized procedures for each of the tests performed.

REFERENCE LABORATORIES

Question: Our office has always used a particular reference laboratory, but lately I have been dissatisified with its service and reliability. How can I investigate reference laboratories when shopping for a new one?

Answer: Choosing a new reference laboratory to meet all your needs is a formidable task. Because there may be a variety of requirements that you wish the reference laboratory to meet, it may be helpful

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Ms. Voldish is a registered technologist and laboratory manager. Questions for this column were answered by POL Committee members Deborah Hassler, MT (ASCP) and Diana Headly, MT (ASCP). Questions can be addressed to Ms. Voldish, 1150 Concord Drive, Haddonfield, NJ 08033.

for you to make a list and compare each laboratory.

1. Test Menu. Does the laboratory perform the type of tests that you will refer to them? Do they specialize in a particular type of assay, such as toxicology or endocrinology? What laboratory do they use when referring tests?

2. Specimen Handling. The laboratory should provide a manual describing the specimen requirements for each test, specimen volume needed, and any special handling (frozen, whole blood, or fasting) that may be required. Other features that may be noted in this manual are CPT code, test fee, assay time, reference range, department, interferences, or test methodology. Specimen containers, mailers, and request forms should be provided. Are the request forms preprinted with your facility name, address, and telephone number? How and when will the specimens be picked up? Does the laboratory use a commercial courier or do they have their own? Will the transporter have the ability to maintain proper temperatures for various tests enroute to the laboratory? Is the specimen traceable from the time it leaves your laboratory until it is received at the reference laboratory? The laboratory should have specific guidelines in specimen rejection.

3. Turnaround Time. The laboratory should state the normal turnaround time for routine tests and special assays. Find out what their guidelines are for STAT testing.

4. Test Reports. An example of various test reports should be available for you to view. Several factors should be included on those reports including patient identification, physician name, specimen date and time (if a timed specimen), specimen result, reference range (age- and sex-adjusted, if appropriate), and some flag of a result outside the reference range. Make sure that the reports are easy to read and understand. Determine which test will contain an interpretive report such as protein electrophoresis. How are the test reports returned to your laboratory? Reference laboratories use a variety of means, including mail, courier, remote printing, facsimile, or telephone. Does the reference laboratory have a list of tests where results always are telephoned? Can your laboratory request a telephoned report? Is there a list available that contains "panic" values to merit immediate notification of the physician?

5. Consultation. Many reference laboratories are now offering various types of consultation services. If you contact the laboratory for information, how difficult is it to speak to someone in a technical area? Is it possible for the physician to discuss a case with a pathologist? Do the pathologists contact the physician concerning abnormal tissue consultation or other consultations to help in the managment of the patients? Is there someone available to speak with 24 hours a day, or only from 8 A.M. to 5 P.M., Monday through Friday? Is there a specific contact you can establish a relationship with or is there simply an anonymous voice at the other end of the line?

6. Licenses or Credentials. Learn what licenses are necessary to operate a laboratory in your state. Do the laboratories you are investigating meet these requirements? Laboratories operating across the state lines must be licensed according to the Clinical Laboratory Improvement Act (CLIA) of 1974. Is the laboratory Medicare approved or accredited by such agencies as CAP or JCAHO? Each of these agencies has its own set of standards the laboratory must meet to uphold its accredited standing.

7. Fees. When fees among laboratories are compared, be sure to consider the type and volume of tests you will be referring. A high fee on a test that may never be requested should be inconsequential to your decision. Inquire about additional discounts that may be available based on a variety of methods. Determine if there are any "hidden" fees for items such as general consultations, a "simple advise," supplies, requisitions, computer usage, shipping, or postage costs. Realize that the lowest fee does not always justify the selection of a certain laboratory. A laboratory may have slightly higher fees, but the value gained in additional services may far outweigh the difference.

8. Extra Service. Many laboratories will offer additional services as part of their package or offer a fee-for-service basis. They may help in instrument or kit selection, test cost analysis, determining appropriate laboratory fees, correct CPT coding for laboratory procedures, routine newsletters, training in certain procedures, or continuing education geared to the office staff. Perhaps the physician is planning a remodeling or building project and would like advice about the laboratory design. These services should only be limited by your imagination. A reference laboratory can be the first place you turn when seeking help with anything concerning laboratory medicine.

9. Reputation. Finally, contact current clients of the laboratory to ask about its track record. Does the laboratory make promises with no follow through? Determine the laboratory service record. Is the laboratory prompt in solving problems? Does the laboratory have a reputation for quality and integrity?

These areas are just a sampling of items to consider when investigating reference laboratory services. If you are looking at more than two or three laboratories, the information could become quite confusing. A helpful means of organizing the information is to develop a checklist of the important factors pertinent to your situation. Check off those that are offered by each laboratory researched. This will help in justifying your final decision. ■

Carcinoma of the Male Breast

JEFFERY W. SEITZINGER, MD

Carcinoma of the male breast remains an unusual entity. Because of this, large series of patients are infrequent and a standard of care has not been established. In this study, 31 male patients with mammary carcinoma were treated over a 29-year interval. The course of these individuals was examined and comparisons were made with the existing literature.

Carcinoma of the male breast was recognized in 1307 by John of Aderne. In the early 1500s, similar reports were made by Franciscus Arcaeus, Ambroise Pare, and Fabricius Hildanus. Male breast carcinoma is a rare lesion, accounting for approximately .2 percent of all cancers and less than 1.5 percent of all cancers in men.[2] There are an estimated 900 cases per year. The female:male ratio has been reported at between 100:1 and 160:1.[4,5]

This report analyzes the experience of mammary cancer in men at a large, suburban hospital in New Jersey and compares the findings with the literature.

MATERIALS AND METHODS

Appropriate data were retrieved from the hospital records of all male patients with breast cancer treated at Saint Barnabas Medical Center, Livingston, during the period January 1970 through March 1989. Additional information was collected from the Saint Barnabas Medical Center Tumor Registry and from attending physicians during followup intervals extending to 14 years. Patient interviews were conducted when possible.

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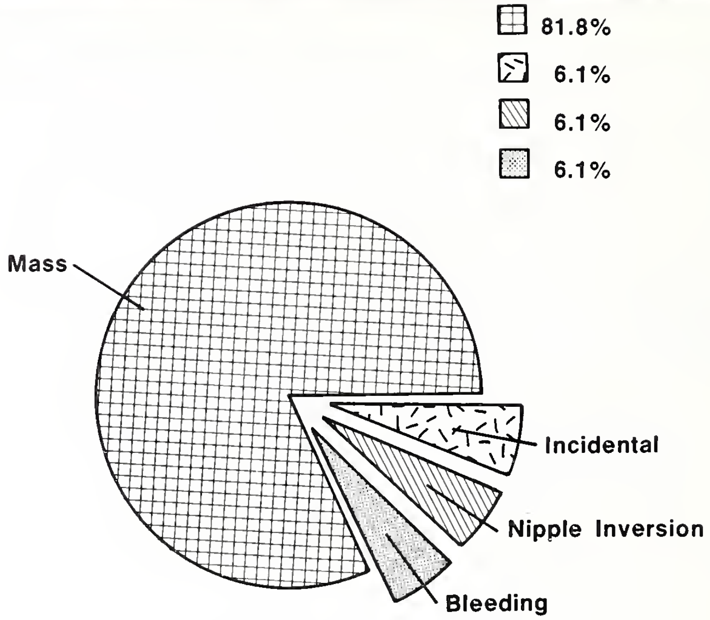

Figure 1. As with females, a lump in the male breast is the most frequent presenting complaint.

Using data available from the records, all patients were staged according to the TNM classification.

PATIENT INFORMATION

During the investigative period, a total of 31 males with mammary carcinoma were evaluated at Saint Barnabas Medical Center. The patient population included 9 patients who received primary treatment at another institution but were referred for adjuvant therapy. All patients were followed at regular intervals by their physicians. Annual evaluation of the patient's condition was obtained and recorded by the Tumor Registry through questionnaires.

RESULTS

General. Thirty-one males with mammary carcinoma presented from 1970 through March 1989. The men were 46 to 87 years of age at the time of diagnosis; the average age was 62. Twenty-nine of the 31 men (94 percent) were white; there was 1 black man and 1 Hispanic man.

Presenting Complaint. Twenty-five men (81 percent) sought medical assistance because of a mass in the breast. Two additional lumps were discovered incidentally by a physician. Of the remaining 4 patients, 2 patients presented with nipple inversion and two patients presented with bleeding from the nipple (Figure 1).

Delay. The length of delay in seeking medical attention was ascertained in 21 of the 31 men (Figure 2). The shortest delay was two weeks; the longest delay was 20 years. Of the 21 men, 11 men (52 percent) delayed six months or less. Five men (24 percent) delayed for one year. All of the ten men who had delayed longer than six months in seeking medical attention reported they finally obtained help because of a change in the character of their mass. In 5 men, the change consisted of an increase in the size of the lump. Two men sought medical attention because the mass had become painful. Three men required attention because of ulceration of the skin.

Site. The laterality of the affliction was nearly equal. Sixteen men (52 percent) had right-sided lesions while 14 men (45 percent) had lesions on the left. There was 1 patient (3 percent) with bilateral carcinoma.

Risk Factors. Risk factors for the development of breast cancer also were evaluated. Gynecomastia was reported in 3 patients (10 percent). A heavy smoking history (greater than 20-pack years) was found in 35 percent. Eleven patients (35 percent) had a family history of cancer including cases of colonic, prostatic, ovarian, uterine, and gastric carcinoma, and sarcoma. There were 4 patients (13 percent) with a family history of breast cancer and 2 patients had multiple occurrences within the family. In addition, there were 4 patients (13 percent) with a second primary carcinoma, including cutaneous carcinoma, oral cavity carcinoma, and hypernephroma.

Therapy. The therapy of these patients was varied and included combinations of surgery, radiotherapy, chemotherapy, and hormal therapy. Modified radical mastectomy was the most frequently performed surgical procedure, accounting for 65 percent of the cases. Seven patients (23 percent) underwent radical mastectomy. Two patients underwent biopsy alone because of advanced disease. One patient each underwent segmental mastectomy with axillary dissection and one patient had lumpectomy alone. Fifty-eight percent of the patients received additional therapy in various combinations of chemotherapy, radiation therapy, and hormonal therapy.

Histopathology. Histologically, 90 percent of the tumors were of the infiltrating ductal type. Of these, two tumors (6 percent) were subclassified as inflammatory carcinoma and one tumor (3 percent) was classified as comedocarcinoma. The remaining 10 percent included two cases of intraductal carcinoma and one case of infiltrating lobular carcinoma.

Estrogen receptor studies were available for 12 patients. All patients (100 percent) demonstrated estrogen receptor positivity. Progesterone receptor studies were available in 10 patients; of these, only three studies (30 percent) were positive.

Stage and Survival. All stages of disease were encountered in the patient population (Figure 3). Five patients (16 percent) presented as stage I and all remain alive today; the longest survival in this group is greater than 14 years. Fifteen patients (48 percent) presented as stage II and 67 percent of these

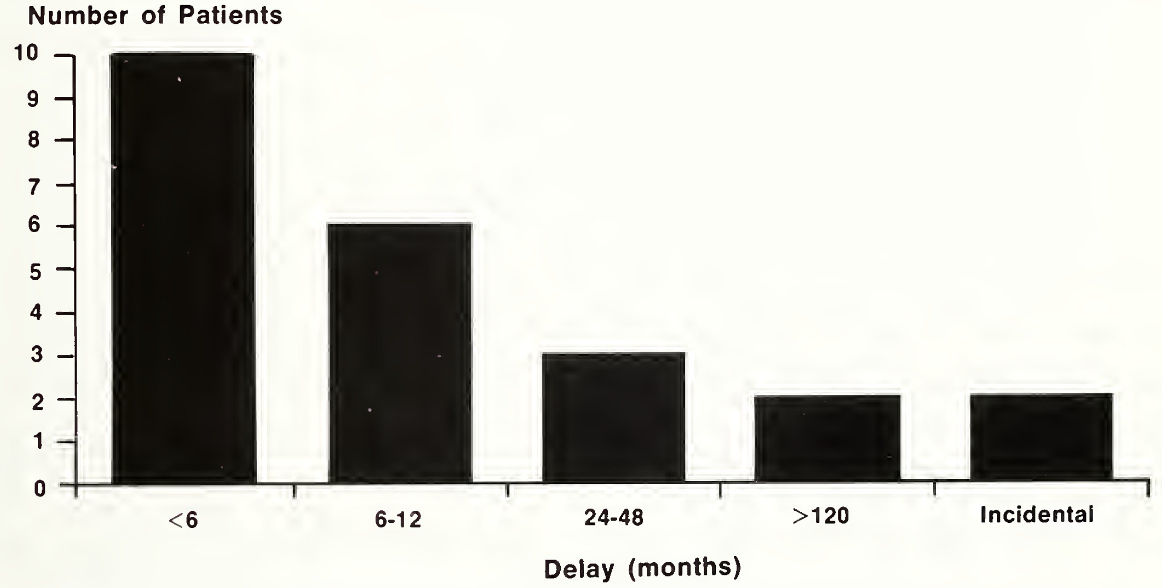

Figure 2. Fifty-two percent of the men delayed six months or less in seeking medical attention.

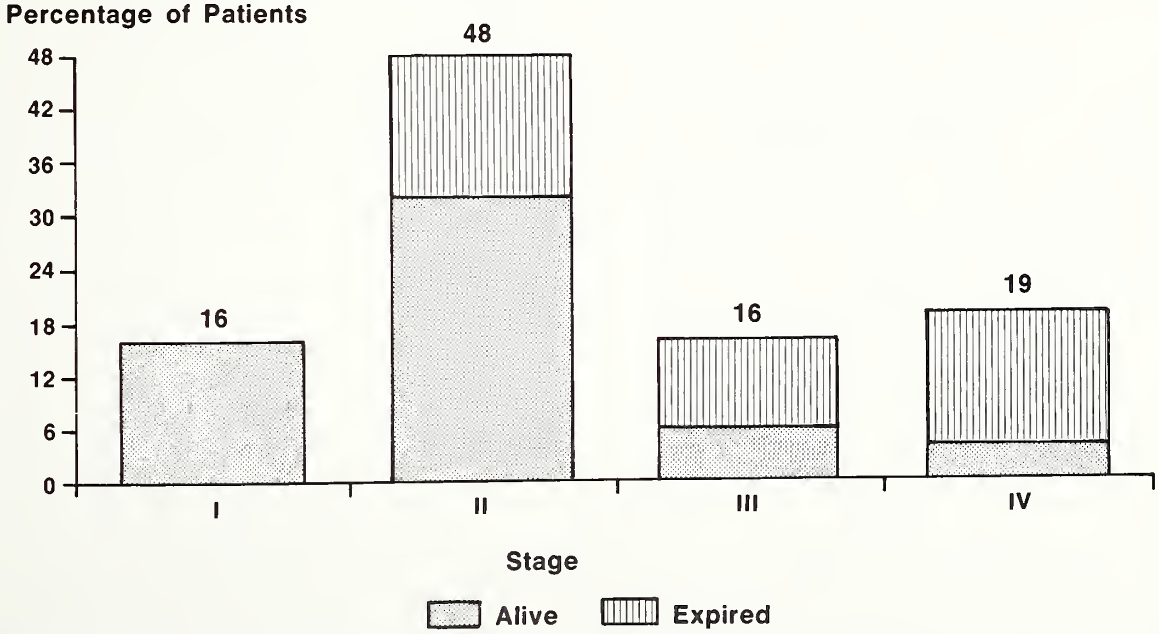

Figure 3. Nearly two-thirds of the men presented as either stage I or stage II.

Table 1. *Survival by stage.*

Stage	Five Year	Ten Year
Combined	52%	31%
I	100%	100%
II	56%	17%
III	75%	50%
IV	17%	0%

patients remain alive with the longest survival being 11 years and 8 months; of the deceased stage II patients, the average survival was 45.6 months and the longest survivor in that group remained alive for 78 months. Five patients (16 percent) comprised the stage III group. Two stage III patients remain alive with survival lengths of 61 and 82 months; of those in stage III who died, the average survival was 44.3 months. Six patients (19 percent) presented as stage IV and 1 patient has remained alive for 57 months; the average survival for the expired stage IV men was 33.4 months.

Five- and ten-year survival rates for the men were calculated as 52 percent and 31 percent, respectively, for all stages combined. The five- and ten-year survival rates by individual stage are found in Table 1.

Cause of Death. The cause of death also was examined. Of the 13 men (42 percent) who succumbed, 11 men (85 percent) died of breast cancer. In addition, one patient died of congestive heart failure and one man died of complications following a cerebrovascular accident.

Tumor Status. The tumor status of the survivors was evaluated. In stage I, four of the men have no evidence of disease. The status of the fifth is unknown since he has refused medical followup. For the survivors in stage II, seven men (70 percent) have no evidence of disease and three men (30 percent) have distant metastases. Two men (20 percent) have had local recurrences in addition to distant spread; of the two survivors in stage III, one patient is free of disease while the other has suffered both distant metastases and local recurrence. The single stage IV survivor has distant metastases. A patient summary for stages I through stage IV is presented in Tables 2 through 6.

DISCUSSION

Assuming there are 900 new cases of male breast cancer per year,[3] the experience of this hospital represents approximately .1 percent of the nation's experience. However, taken collectively, a series of 31 patients is substantial when compared with other series in the literature.

Male breast cancer has been described in patients from 5 to 91 years of age. Carcinoma of the male breast is rare in those less than 40 years of age. The average age of presentation (62 years) is 10 years older for males than for females.[4] The average age in this series corresponds exactly.

The finding that 94 percent of patients are white is comparable with other figures.[1,2] It has been reported[6] that male breast cancer is less frequent in blacks; however, in a West African series by Ajayi, a frequency rate of 2.4 percent seems to contradict this statement.[7] The rate of 3.2 percent in this series is consistent with Ajayi's finding. Breast carcinoma in Hispanic males is exceedingly rare and has not been adequately reported.

The presenting symptoms are similar to those found in the female. A lump in the breast is the most frequent complaint. Most cancers lie immediately beneath or within a few centimeters of the areola.[8] Crichlow's finding that 33 percent are associated

Table 2. *Summary of stage I patients.*

Age	Delay (Months)	Surgery	Additional Therapy	Histology	Tumor Status	Survival (Months)
63	12	Modified radical mastectomy	Negative	Intraductal	No evidence of disease	26
58	4	Modified radical mastectomy	Negative	Infiltrating ductal	No evidence of disease	5
55	24	Modified radical mastectomy	Radiotherapy, chemotherapy	Infiltrating lobular	No evidence of disease	7
59	Unknown	Lumpectomy	Negative	Intraductal	Unknown	129
55	Unknown	Radical mastectomy	Radiotherapy	Infiltrating ductal	No evidence of disease	169

with nipple retraction and ulceration is double the 16 percent rate found in our patients.[9] The 6 percent who presented with discharge from the nipple corresponds with reports by Scheike.[10]

Many authors have noted that breast carcinoma in men usually is more advanced.[4,5,8,11] Bavafa reported 52 percent of patients as either stage III or stage IV.[4] Similarly, Langlands[11] and Scheike[8] reported 65 percent and 54 percent, respectively, as either stage III or stage IV. This has been ascribed to the statement that men delay in seeking advice twice as long as females.[4] However, only 35 percent of the patients in this series were stages III and IV and 52 percent delayed six months or less. These disparities with previous reports are explained by such possible factors as a more educated and health conscious society, as well as a better awareness of the disease itself.

The reported overwhelming preference for occurrence on the left side[12] has not been substantiated in this group where less than half of the patients had left-sided lesions. The single case of bilateral carcinoma reported here is exceedingly rare.

Regarding risk factors for the development of

Table 3. *Summary of living stage II patients.*

Age	Delay (Months)	Surgery	Additional Therapy	Histology	Tumor Status	Survival (Months)
56	.5	Radical mastectomy	Negative	Infiltrating ductal	No evidence of disease	106
52	Unknown	Modified radical mastectomy	Radiotherapy	Infiltrating ductal	Distant metastases	68
73	1	Radical mastectomy	Radiotherapy	Infiltrating ductal	No evidence of disease	78
52	2	Modified radical mastectomy	Chemotherapy	Infiltrating ductal	No evidence of disease	27
65	12	Modified radical mastectomy	Negative	Infiltrating ductal	Distant metastases local recurrence	42
57	12	Radical mastectomy	Negative	Infiltrating ductal	No evidence of disease	140
87	6	Modified radical mastectomy	Negative	Infiltrating ductal	No evidence of disease	16
75	Incidental	Modified radical mastectomy	Negative	Infiltrating ductal	No evidence of disease	21
46	Unknown	Modified radical mastectomy	Radiotherapy, chemotherapy, hormonal therapy	Comedo-carcinoma	Distant metastases local recurrence	39
63	240	Modified radical mastectomy	Negative	Infiltrating ductal	No evidence of disease	12

Table 4. *Summary of expired stage II patients.*

Age	Delay (Months)	Surgery	Additional Therapy	Histology	Cause of death	Tumor status	Survival (Months)
70	12	Modified radical mastectomy	Radiotherapy, chemotherapy	Infiltrating ductal	Mammary carcinoma	Distant metastases, local recurrence	38
72	3	Modified radical mastectomy	Hormonal therapy	Infiltrating ductal	Mammary carcinoma	Distant metastases	55
49	Incidental	Radical mastectomy	Negative	Infiltrating ductal	Mammary carcinoma	Distant metastases	53
59	Unknown	Modified radical mastectomy	Chemotherapy, hormonal therapy	Infiltrating ductal	Mammary carcinoma	Distant metastases	74
81	12	Modified radical mastectomy	Negative	Infiltrating ductal	Congestive heart failure	No evidence of disease	8

breast cancer in the male, several points deserve comment. A history of heavy smoking and a family history of cancer was found in a significant proportion of the patient population. While these factors may not be related specifically to the development of mammary cancer, they are indicators of the patient's general health and genetic background. The finding that two patients had multiple familial occurrences of breast cancer is important and should be considered a significant risk factor.

An interesting and often described feature of male breast cancer is its association with Klinefelter's syndrome. Klinefelter's syndrome (genotype XXY) is a condition associated with diminished testosterone levels and an increased incidence of gynecomastia. Generally, it is believed that Klinefelter's syndrome is the single factor that most predisposes to male breast cancer with the risk being 20 times higher than in normal men (and about one fifth the frequency in normal women).[13] An explanation is not clear; however, the relatively high levels of plasma estrogen seem to be an important factor. Despite these reports, no cases of Klinefelter's syndrome were identified in this series. Gynecomastia itself is suggested as a predisposing factor, but reports are conflicting and the frequency of such an association is variable. The 10 percent incidence in this series is far below the 27 percent reported by Scheike and Visfeldt.[14]

Another purported feature of male breast cancer patients not supported by this study is the increased incidence of second primaries. Forty-one percent have been described to have large bowel or rectal primaries.[11] No such patients were identified. Of the four (13 percent) with second primaries, the development of cutaneous carcinoma in two patients may

Table 5. ***Summary of stage III patients.***

Age	Delay (Months)	Surgery	Additional Therapy	Histology	Cause of death	Tumor status	Survival (Months)
56	36	Modified radical mastectomy	Radiotherapy	Infiltrating ductal	Not applicable	Distant metastases, local recurrence	61
55	2	Modified radical mastectomy	Negative	Infiltrating ductal	Not applicable	No evidence of disease	82
58	.5	Radical mastectomy	Radiotherapy	Infiltrating ductal	Mammary carcinoma	Distant metastases	17
51	2	Radical mastectomy	Radiotherapy, chemotherapy, hormonal therapy	Infiltrating ductal	Mammary carcinoma	Distant metastases	114
77	2	Modified radical mastectomy	Negative	Infiltrating ductal	Cerebrovascular accident	No evidence of disease	2

Table 6. ***Summary of stage IV patients.***

Age	Delay (Months)	Surgery	Additional Therapy	Histology	Cause of death	Tumor status	Survival (Months)
55	48	Modified radical mastectomy	Radiotherapy, chemotherapy	Inflammatory	Not applicable	Distant metastases	57
62	Unknown	Modified radical mastectomy	Radiotherapy, chemotherapy	Infiltrating ductal	Mammary carcinoma	Distant metastases, local recurrence	30
62	Unknown	Modified radical mastectomy	Radiotherapy, chemotherapy, hormonal therapy	Infiltrating ductal	Mammary carcinoma	Distant metastases, local recurrence	78
82	1	Biopsy	Radiotherapy	Infiltrating ductal	Mammary carcinoma	Distant metastases	7
58	Unknown	Biopsy	Radiotherapy, chemotherapy	Infiltrating ductal	Mammary carcinoma	Distant metastases	8
63	120	Segmental mastectomy axillary dissection	Radiotherapy, chemotherapy, hormonal therapy	Inflammatory	Mammary carcinoma	Distant metastases	44

be explained by the advanced age of these patients. The patient with oral cavity carcinoma predictably was a heavy smoker. The only remaining patient had an additional hypernephroma.

Histologically, male and female breast pathologies are similar. Approximately 90 percent are infiltrating ductal, with intraductal being the second most common form at 7 percent.[1] Cases of medullary, comedocarcinoma, and lobular carcinoma are rare. The finding of inflammatory carcinoma in two patients has been poorly documented previously but should be considered unusual.

An unusually high proportion of male breast carcinoma has been found to be estrogen receptor positive. The figure of 80 percent is approximately double that for females.[15] The 100 percent positivity rate in this series probably is skewed by the small number of patients who received this test.

It generally is believed that male breast cancer has a poor prognosis in relation to females with the same affliction. Crude five-year survival rates vary from 19 to 83 percent.[16,17] However, figures from the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) Program reveal comparable five- and ten-year survival rates of 60 percent and 37 percent for males and 65 percent and 47 percent for females, respectively.[18] The observed five- and ten-year survival rates of 52 percent and 31 percent in this series correlated well with those statistics when all stages are considered collectively. However, the five- and ten-year survival rates for stage II patients are more dismal than would be expected for similarly staged females.[19] By the same token, stage III patients in this series fared better than would be expected, at least in the five-year survival category. Possible explanations for these disparities include the fact that 60 percent of stage II patients in this series were diagnosed less than five years ago and, therefore, were not included in the survival data. If their prognosis is truly similar to their female counterparts, we would expect most of these patients to have a long survival. In addition, the survival rate is greatly affected by the small number of patients in each category.

The outlook for these patients, in general, is not favorable. Of those patients who died, the majority (85 percent) have died from breast disease. In addition, nearly one third of the living males have metastases at present and likely will succumb to their disease as well. An exception to this poor prognosis would appear to be those diagnosed as stage I and treated aggressively.

SUMMARY

A series of 31 male patients with mammary carcinoma has been presented. The rarity of this entity makes large series over a short interval unlikely and precludes all but a few from becoming specialists in dealing with this disease. This may explain the disparity in individual reports found in the literature. Great strides have been made in alerting the population of the existence of male breast cancer. It remains, however, the duty of the physician to examine his patients with this diagnosis in mind. Risk factors such as a family history of breast cancer and a history of Klinefelter's syndrome should alert one's suspicion. Other features such as nipple discharge and a lump, all lend support to the diagnosis. An aggressive approach to therapy then is warranted. ■

REFERENCES

1. Vercoutere AL, O'Connell TX: Carcinoma of the nale breast, an update. *Arch Surg* 119:1301-1304, 1985.
2. Hodson GR, et al.: Male breast carcinoma. *Am Surg* 51:47-49, 1985.
3. Silverberg E, Lubera JA: Cancer statistics, 1989. *Ca—Cancer J Clin* 39: 3-20, 1989.
4. Bavafa S, et al.: An updated experience at a Veteran's Administration Hospital and review of the literature. *J Surg Oncol* 24:41-45, 1983.
5. Panettiere FJ: Cancer in the male breast. *Cancer* 34:1324-1327, 1974.
6. Moss NH: Cancer of the male breast. *Ann NY Acad Sci* 114:937-950, 1964.
7. Ajayi DOS, et al.: Carcinoma of the male breast in Vest Africans and a review of the world literature. *Cancer* 50:1664-1667, 1982.
8. Scheike O: Male breast cancer. Six factors influencng prognosis. *Br J Cancer* 30:261-271, 1974.
9. Crichlow RW: Carcinoma of the male breast. *Surg Gynecol Obstet* 134:1011-1019, 1972.
10. Scheike O: Male breast cancer: Clinical manifestations in 257 cases in Denmark. *Br J Cancer* 28:552-561, 1973.
11. Langlands AO, et al.: Carcinoma of the male breast: Report of a series of 88 cases. *Clin Radiol* 27:21-25, 1976.
12. Sanchez AG, et al.: Lobular carcinoma of the breast in a patient with Klinefelter's syndrome. *Cancer* 57:1181-1183, 1986.
13. Scheike O, et al.: Male breast cancer. Breast carcinoma in association with Klinefelter's syndrome. *Acta Pathol Microbial Scand* 81:352-358, 1973.
14. Scheike O, Visfeldt J: Male breast cancer. Gynecomastia in patients with breast cancer. *Acta Pathol Microbiol Scand* 81:359-365, 1973.
15. Van Geel AN, et al.: A retrospective study of male breast cancer in Holland. *Br J Surg* 72:724-727, 1985.
16. Wainwright JM: Carcinoma of the male breast: Clinical and pathological study. *Arch Surg* 14:836-859, 1972.
17. Classen JN, et al.: Cancer in the male breast. *Arch Surg* 100:66-67, 1970.
18. Myers MH, Gloeckler Ries LA: Cancer patient survival rates: SEER Program results for ten years of followup. *Ca—Cancer J Clin* 39:21-32, 1989.
19. Seidman H, et al.: Survival experience in the breast cancer detection demonstration project (BCDDP). *Ca—Cancer J Clin* 37:258-290, 1987.

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Squamous Cell Cancer of the Larynx

in an Intravenous Drug User with AIDS

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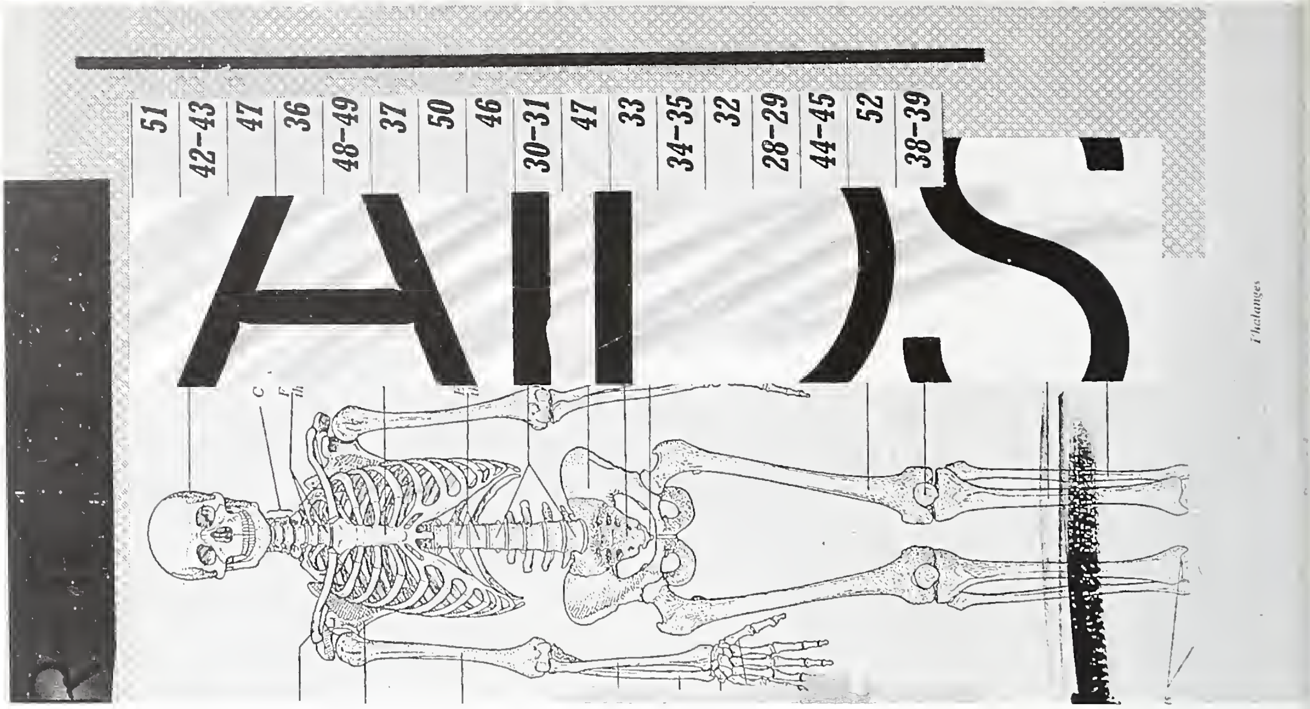
We present the case of a 29-year-old intravenous drug user with AIDS and squamous cell cancer of the larynx. Profound immunosuppression was evident by an OKT4:OKT8 ratio of 0.1. Simultaneous treatment of the laryngeal cancer by laser vaporization and treatment of immunosuppression with zidovudine resulted in no tumor recurrence after one year.

Secondary cancers, including Kaposi's sarcoma and lymphoma, occur with increased frequency in human immunocyte virus (HIV)-infected patients.[1-3] The following report is the first case of squamous cell carcinoma (SCC) of the larynx occurring in an intravenous drug user with acquired immunodeficiency syndrome (AIDS). We discuss the management of squamous cell cancer with respect to the profound immunosuppression caused by HIV.

CASE REPORT

A 29-year-old male intravenous drug user was admitted to St. Francis Medical Center, Trenton, because of hoarseness of his voice. He denied cigarette and alcohol use, and homosexual activity. Mild supraclavicular adenopathy was present on physical examination. White blood cell count was 2.2 x 10^9/L (3.2 - 9.8 x 10^9/L) with a total lymphocyte count of 0.2 x 10^9/L (1.2 - 3.4 x 10^9/L). The

From the Department of Surgery, St. Francis Medical Center, Trenton, where Drs. J.G. Barone and Cuppari are residents in surgery, Dr. Hutchinson is chief of otolaryngology, and Dr. J.E. Barone is chief of surgery. The manuscript was submitted in April 1990 and accepted in June 1990. Requests for reprints may be addressed to Dr. J.G. Barone, 464 Northam Drive, North Brunswick, NJ 08902.



OKT4:OKT8 ratio was 0.1. Antibody titers for HIV were positive by enzyme-linked immunosorbent assay (ELISA) and by Western blot. Microscopic direct laryngoscopy demonstrated thickened erythematous vocal cords. The abnormal tissue was biopsied and then vaporized with a carbon dioxide laser until healthy vocalis muscle was seen. The biopsy specimen revealed primary laryngeal SCC in situ. Oral zidovudine was started postoperatively because of profound immunosuppression. The patient was discharged and maintained on zidovudine with an improvement in the OKT4:OKT8 ratio to 0.2 after six weeks. Followup laryngoscopic examinations have been negative for tumor at one year.

HIV infection progresses from the acute infection to AIDS, the final stage of HIV infection. AIDS is characterized by fever, weight loss, malaise, and the development of opportunistic infections. A high incidence of secondary cancers also develops during the final stage of HIV infection, including Kaposi's sarcoma and lymphomas.[1] The relationship between HIV infection and squamous cell cancer is not firmly established, but there is an increased incidence of tumors of the oral cavity among homosexuals with AIDS.[2] Squamous cell cancers of the skin and epiglottis also have been reported to occur in HIV-infected patients.[3,4]

Our patient developed carcinoma of the larynx and was profoundly immunocompromised as indicated by a 0.1 OKT4:OKT8 ratio. All of the established risk factors for laryngeal cancer were absent, including age over 50 years, chronic irritation, and tobacco and alcohol abuse. This suggests that HIV or the profound immunosuppression it causes may have played a role in the development of cancer in our patient.

Physicians should try to obtain HIV antibody titers if a patient at risk for this infection develops an unusual cancer. Testing with ELISA detects antibody to viral particles and is highly sensitive, but can produce false positive results.[5] Western blot is more specific since it uses electrophoresis to separate viral antigens.[5] It should be performed when the ELISA is positive. If HIV infection is confirmed, strong consideration should be given to treating both the cancer and the immunosuppression caused by HIV infection with zidovudine (200 mg orally every four hours). In our patient, tumor vaporization and treatment of immunosuppression resulted in no tumor recurrence at one year. ■

REFERENCES

1. Centers for Disease Control: AIDS weekly surveillance report. August 29, 1988, p. 1-5.

2. Lozada F, Silverman S Jr, Conant M: A new outbreak of oral tumors, malignancies, and infectious diseases strikes young male homosexuals. *Can Dent Assoc J* 10:39-42, 1982.

3. Alhahimi MM, Krasnow SH, Johnston-Early A: Squamous cell carcinoma of the epiglottis in a homosexual man at risk for AIDS. *JAMA* 253:2366, 1985.

4. Overly WL, Jakubek DJ: Multiple squamous cell carcinomas and human immunodeficiency virus infection. *Ann Intern Med* 106:334, 1987.

5. Scutchfield FD, Benenson AS: AIDS update. *Postgrad Med* 85:289-304, 1989.

Parathyroid Adenoma

with Conflicting Parathyroid Hormone Levels

MICHAEL H. GOLDMAN, MD
ARATI SURESH, MD

For discrepant diagnoses in a patient with hypercalcemia, the authors utilized three different parathyroid hormone assays. The new two-site immunoradiometric assay (IRMA) proved to be the most accurate and is recommended in the differential diagnosis of hypercalcemia.

Problems interpreting parathyroid hormone (PTH) assays in the differential diagnosis of hypercalcemia are well known.[1,2] We report a patient having a parathyroid adenoma with conlicting PTH determinations using different immunochemical assays: carboxy (C)-terminal; amino N)-terminal; and two-site (IRMA).

CASE REPORT

A 42-year-old female was evaluated for an elevated calcium level discovered on a routine chemistry screen (Table). Two years earlier, her calcium level was normal. After discontinuing 500 mg of calcium supplement, a repeat calcium also was elevated. She had no significant past medical history and the family history revealed no calcium disorders. Physical examination was completely unremarkable.

A PTH (C-terminal) level of 0.5 ng/mL (normal, 0.1-1.8 ng/mL) was consistent with nonparathyroid hypercalcemia. An N-terminal PTH (done mistakenly by the laboratory instead of an ordered IRMA PTH) also was consistent with tumor of nonparathyroid hypercalcemia. Routine chest x-ray, mammogram, and angiotensin-converting enzyme were normal. Mild primary hypothyroidism (TSH 6.2 [normal 0.3-5.0 μU/mL], with normal T4 and T3 resin), was successfully treated (TSH 1.5, on Sep-

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tember 9, 1989). Total 24-hour urinary calcium excretion was 250 mg/24 hours (normal, 50-275 mg/24 hours). Serum protein electrophoresis, tuberculosis skin test, and standard chemistries including phosphate, chloride, albumin, and alkaline phosphatase were normal. Also, 1-25 vitamin D was elevated at 48.4 pg/mL (normal, 16.4-42 pg/mL). An intact, IRMA PTH was 84 pg/mL (normal, 10-65 pg/mL) with a calcium of 11.3 (normal, 8.8-10.4) This was consistent with primary hyperparathyroidism (PHP). One month later, an N-terminal PTH (again mistakenly done by the laboratory) was 16 pg/mL (normal, 8-24 pg/mL) suggestive of "non-parathyroid" replacement. An intact IRMA PTH one month later, was 74 pg/mL, indicating PHP.

After thorough discussion with the patient, emphasizing the fact that statistically she most likely had PHP and that she had no evidence of any secondary causes for hypercalcemia, the patient agreed to have surgery. Our patient refused participation in a "natural history" study group of hypercalcemia.

A left lower pole parathyroid adenoma was removed. A thyroid biopsy showed chronic lymphocytic thyroiditis. Two months later, calcium was normal at 8.9 mg/dL.

DISCUSSION

PTH determination is the diagnostic test of choice in the differential diagnosis of hypercalcemia. It most commonly is used to differentiate primary hyperparathyroidism (PHP) from other causes of hypercalcemia. The latter disorders include diverse entities such as the use of pharmacologic agents (thiazides and vitamins A and D), granulomatous diseases (sarcoid and tuberculosis), malignant disorders (with or without skeletal metastases), or other endocrine pathology (Addison's disease or thyrotoxicosis). Unfortunately, PTH assays do not always clearly segregate these conditions with the expected elevated PTH levels in PHP and low PTH levels in the secondary causes. Comparison of available assays, in 1979 and 1987, revealed this difficulty.[1,2] Immunoheterogenicity of PTH in the circulation and different antibody specificities account for the conflict and overlap in the clinical utility of PTH assays.

PTH is a single-chain polypeptide of 84 amino acids.[3] The intact molecule is cleaved in the circulation leaving N- and C-terminal fragments. The biological activity of the hormone is localized within the N-terminal position of the molecule (PTH 1-34); antisera, directed towards the N-terminal portion, will measure intact (1-84) hormone as well as N-terminal fragments, i.e. 1-34. C-terminal antisera will measure intact hormone and C-terminal fragments, i.e. 53-84. Specific midregion assays measure intact hormone and midsegment fragments.

Table. ***Chemistry screen.***

Date	Calcium (mg/dL)	Normal (mg/dL)	PTH	Assay Type (Lab)	Comments
10/87	10.4	8.5-10.8			
4/89	11.4	8.5-10.6			
7/89	11	8.5-10.6	0.5 mg/dL	C-terminal (Roche)	Nonparathyroid Hypercalcemia
7/89	10.7	8.8-10.4	20 pg/mL	N-terminal (Nichols)	Hypercalcemia of malignancy
9/89	10.8	8.8-10.4			
9/89	11.2	8.8-10.4	84 pg/mL	Intact IRMA (Nichols)	Primary hyperparathyroid
10/89	11.3	8.8-10.4	16 pg/mL	N-terminal (Nichols)	Hypercalcemia of malignancy
11/89	11.1	8.8-10.4	74 pg/mL	Intact IRMA (Nichols)	Primary hyperparathyroid
12/89	8.9	8.7-10.7			Postoperative

Clinically, assays directed towards the C-terminal and middle regions of PTH, have been shown to be the most sensitive for the detection and evaluation of hyperparathyroidism. N-terminal assays are more helpful in certain situations such as the followup of patients with chronic renal failure.[4] This is due to the short half-life of intact PTH (about six minutes) while C-terminal PTH is longer (about one hour), with the latter especially accumulating with progressive renal failure.

Recently, a two-site IRMA[5] has been developed to measure intact PTH without interference from fragments. It is found that this new assay improves the discriminatory ability of PTH in assessing calcium disorders of patients with hyperparathyroidism from hypercalcemia of malignancy.[6] However, even with this assay, 3 to 5 percent of patients with hyperparathyroidism have values at the upper range of normal and 20 to 30 percent of patients with hypercalcemia of malignancy have low, but detectable concentrations of intact PTH.

Another reason for variation in PTH levels is due to a circadian rhythm of PTH; levels taken between 0200 and 0600 hours may be found to be physiologically elevated. A late morning or afternoon sampling of PTH level is recommended.[7] Because of the variability of the PTH assays, their high cost, and lengthy analysis time, a number of ancillary tests have been utilized to differentiate PHP from hypercalcemia of malignancy. In one study, 18 different tests were compared.[8] Included were albumin, chloride, venous Ph, phosphatase, phosphorus, chloride phosphate ratio, and hematocrit. Individually, none of these tests had better than 81 percent classification accuracy. In general, findings related to malignancy included a mild metabolic alkalosis, low albumin, low red blood cell mass, and high alkaline phosphatase. Laboratory data, related to the action of parathyroid hormone, included a low phosphate and high chloride/phosphorous ratio. The authors concluded that the commonly available auxiliary tests do not help in the differential diagnosis of hypercalcemia and merely added to increased cost.

It has been suggested that 1-25 vitamin D is of help in the differential diagnosis of hypercalcemia. Stewart found high-normal, and elevated levels in PHP, while low or low-normal levels were observed in cancer-associated hypercalcemia.[9] PTH stimulates hydroxylation of 25 vitamin D to 1-25 vitamin D; raised levels are consistent with PHP. Our patient has an increased level; however, this laboratory test has been an inconsistent finding.

Another condition to be considered in this differential diagnosis is familial benign hypercalcemia (FBH).[10] FBH is an autosomal dominant disorder of calcium and magnesium metabolism characterized by lifelong, symptomless, nonprogressive hypercalcemia with usually normal serum immunoreactive parathyroid hormone concentrations and parathyroid glands that usually are grossly and histologically normal. It is characterized by hypocalciuric hypercalcemia and a low calcium to creatinine excretion ratio. Our patient did not have these historical or family findings. A calcium to creatinine excretion ratio was not done.

Hypothyroidism also can cause reversible hypocalciuric hypercalcemia with raised PTH and Vitamin D.[11] Our patient had mild hypothyroidism but was successfully treated without resolution of her hypercalcemia.

CONCLUSION

We report a case of PHP with conflicting C-terminal, N-terminal, and IRMA assays. The IRMA PTH assay was found to be the most reliable test and currently is considered the best PTH assay, differentiating hypercalcemia of PHP from other causes. ■

REFERENCES

1. Raisz LG, Yanjnik CH, Bockman RS, Bower BF: Comparison of commercially available parathyroid hormone immunoassays in the differential diagnosis of hyperparathyroidism or malignancy. *Ann Intern Med* 91:739-741, 1979.

2. Lufkin, EG, Kao PC, Hunter H: Parathyroid hormone radioimmunoassays in the differential diagnosis of hypercalcemia due to primary hyperparathyroidism or malignancy. *Ann Intern Med* 106:559-560, 1987.

3. Keutman HT, Sauer MM, Hendy GN, et al.: Complete amino acid sequence of human parathyroid hormone. *Biochemistry* 17:5723-5729, 1978.

4. Frietag J, Martin KJ, Husha KA, et al.: Impaired parathyroid hormone metabolism in patients with chronic renal failure. *N Engl J Med* 298:29-32, 1978.

5. Nussbaum, Zahradnik, Lavigne: Highly sensitive wo-site immunoradiometric assay of parathyroid and its clinical utility in evaluating patients with hypercalcemia. *Clin Chem* 33:1364-1367, 1982.

6. Logue FC, Beastall GH, Fraser WD: Intact parathyroid assays. *Br Med J* 300:210-214, 1990.

7. Logue FC, Fraser WD, O'Reilly DJ, Beastall GH: The circadian rhythm of intact parathyroid hormone (1-84) and nephrogenous cyclic adenosine monophosphate in normal men. *J Endocrinol* 121:R1-3, 1989.

8. Boyd JC, Ladenson JH: Value of laboratory tests in the differential diagnosis of hypercalcemia. *Am J Med* 71:863, 1984.

9. Stewart AF, Horst R, Deftos LJ, et al.: Biochemical evaluation of patients with cancer-associated hypercalcemia. *N Engl J Med* 303:1377-1383, 1980.

10. Law WM, Hunter H: Familial benign hypercalcemia. *Ann Intern Med* 102:511-519, 1985.

11. Zaloga GP, Eil C, O'Brian JT: Reversible hypocalciuric hypercalcemia associated with hypothyroidism. *Am J Med* 71:101-104, 1984.

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Medical Services for the Developmentally Disabled

TED KASTNER, MD
JOAN LUCKHARDT, PhD

Access to medical care for people with developmental disabilities is a growing problem. The authors review the components of a health care delivery system to help meet the special medical needs of this population.

A growing number of people with mental retardation and other developmental disabilities no longer live in institutions; they live independent lives in New Jersey communities. However, the inability of clients to receive adequate health care in communities is an obstacle to their receiving the benefits of community residence.

There are many complex reasons for this problem: flaws in the health care system including limitations of those responsible for direct care of the developmentally disabled; patients' medical and behavioral problems; and physicians' limitations. Shortcomings in the health care delivery system can be overcome only if physicians join with representatives of state agencies and advocacy organizations to create and implement a comprehensive plan for the delivery of community-based health care services serving this residential population.

A SHIFT TO RESIDENTIAL LIVING

Using a functional rather than a categorical definition of disability, over 20,000 New Jersey citizens are eligible for state services. A person with a developmental disability is a person whose disability appeared before age 22 and is unable to be indepen-

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dent in two or more activities of daily living. The term encompasses people with mental retardation, cerebral palsy, or other limiting conditions.

Currently, more than 5,000 of New Jersey's disabled citizens, most of them mentally retarded, live in institutions or developmental centers operated by the New Jersey State Division of Developmental Disabilities. Many will leave for community residences as the aged facilities, some over 100 years old, are closed. There are over 1,400 persons on waiting lists for community placement and an additional 2,000 people, cared for by their families, also await community placement.

A growing number of disabled individuals will reach adulthood without having lived in an institution. Many live longer and develop skills enabling them to hold competitive jobs in the community and to live with minimum support. For this population, health care is seen as a component of a residential service package that includes residential care, occupational training, family services, and behavioral treatments.

BARRIERS TO CARE

System barriers. Fragmentation of health care services hinders care. When residential care first was planned, social planners assumed appropriate medical care would be available in the community from local physicians. In contrast, the state provided medical services in institutions. However, physicians and nurses employed in state institutions, except in rare emergencies, do not provide medical services to community residents.

Table 1. ***Barriers to health care for persons with developmental disabilities.***

System Barriers

1. Fragmented health care delivery system.
2. Lack of planning.
3. Excessive federal (HCFA) and state regulation.
4. Low Medicaid reimbursement.
5. Long office visits with excessive paperwork.

Consumer Barriers

1. Frequent inability to communicate symptoms.
2. Lack of medical history.
3. More complex medical/behavioral problems.
4. Confusion around guardianship and informed consent.

Provider Barriers

1. Negative attitudes towards working with people with developmental disabilities.
2. Architectural barriers.
3. Gaps in transportation.
4. Uneven geographic physician distribution.
5. Lack of medical school/residency training combined with lack of clinical experience.

Direct Care Providers Barrier

1. Inadequate training of direct care staff.
2. Excessive paperwork.
3. Crisis-oriented care.

Health care coordination is a major need for people with developmental disabilities, yet health care services for people with developmental disabilities rarely are integrated with other services.[13,14] Coordination is necessary because many of the direct care staff lack the skills needed to implement physician recommendations, observe client symptoms, and relate information at followup.

Another problem, perhaps more easily solved, is the excessive paperwork tied to documentation requirements of the state or the residential care provider. Each may require documentation beyond that usually kept for billing or office medical charts. (The form may emphasize incident reporting rather than health maintenance or preventive care.)

Of all the major barriers, lack of money to buy physician services is the most cited obstacle. Persons with developmental disabilities do not readily access care in a fee-for-service system. Certainly, low Medicaid reimbursements for services are significant disincentives for health care providers (Table 1).

Medicaid reimbursement gives a set fee for each visit, ignoring the length of a visit. Because patients with developmental disabilities often require longer office visits than other patients, the already low fee becomes even lower. For these reasons, among others, many doctors do not accept Medicaid patients, particularly new Medicaid patients.

In a telephone survey conducted by the New Jersey State Department of Health, 80 physicians in a rural county were interviewed in regard to Medicaid. Of the 80, only 17 physicians said they accepted Medicaid at all. Eight physicians said they would accept new Medicaid patients but only in an emergency situation. Only 2 physicians stated they would accept new patients for routine care.

In another study, the New Jersey Association for Retarded Citizens contacted four county Medicaid offices to obtain health care for a specific client. Only two physicians said they would accept new Medicaid patients. In a shore community, a physician group wrote to the New Jersey State Department of Health stating obstetricians no longer would treat indigent or poor patients.

The difficulties faced by persons with developmental disabilities in New Jersey are similar to those seen nationally. Approximately 76 percent of clients with mental retardation who receive state services are Medicaid eligible; in New Jersey, the figures are similar. Adults with mental retardation who live in the community in Massachusetts averaged little more than two physician contacts per year. This low rate of utilization was attributed to a low level of physician reimbursement ($22 per primary care visit), fragmentation of care, and lack of coordinated treatment. New Jersey pays $12 per visit.

Barriers presented by the patient. Persons with developmental disabilities represent a unique clinical challenge to the practitioner. Patients frequently lack a medical history and can lack an ability to communicate symptoms. Minihan reports physicians in Maine rank a lack of medical history as the greatest barrier to medical care for people with disabilities.[11,12] Moreover, their medical problems often are more complex than those of the general population. The difficulties in treating people with severe behavior problems are challenging. Lastly, issues of informed consent and guardianship often are overlooked.

Physician barriers. Some physicians harbor negative attitudes toward working with people with developmental disabilities. In addition, lack of specific training and experience in the care of persons with developmental disabilities has a negative impact on the quality of care. Garrard has stated there is no evidence that access "to the community health system [can] be readily achieved by this group, that professionals [are to] be prepared to respond appropriately, or that services delivered meet the requirements of the population."[6]

Uneven distribution of physicians or lack of a referral network for this population also can decrease the availability of medical care, particularly subspecialty care. Minihan assessed the need for physician services for institutionalized persons prior to their transfer to community residential settings and then followed their subsequent treatment by community-based physicians. A reliance on existing community physician services led to inadequate medical care for a number of individuals.

Only a few persons were able to have their health care needs met by the primary care physician alone. Subspecialty services such as orthopedics, behavioral medicine, neurology, and psychiatry generally were not available in the community from physicians with the experience and training necessary to serve this group.

In a 1987 New Jersey survey, the southern region of the Division of Developmental Disabilities found only 77 percent of their clients had access to a personal physician. Only 1 percent of the clients had seen a psychiatrist during 1987, although 18.5 percent of the clients were taking psychotropic medications. (The southern region then served about 2,350 clients.)

Table 2. ***Basic issues in community-based health care.***

1. Multiple options for the delivery of health care must be used.
2. Each person should have a "medical home" for stable primary care.
3. The concept of a health care network is essential.
4. The network will require the presence of resource centers for specialty care.
5. A health care clearinghouse should be established.
6. A comprehensive record of personal health status and standards for delivery of care are needed.
7. Fees for service must be fair and set at the prevailing market level.
8. Training is critical for workers at all levels.
9. Health services research and evaluation are needed.
10. Coordination and watchdog components are required.

*Adapted from the Symposium on Community Health Care Services for Adults with Mental Retardation, a publication outgrowth of the Sterling D. Garrard Memorial Symposium on Community Health Care Services for Adults with Mental Retardation.

DELIVERY SYSTEMS

In an effort to remedy these shortcomings, researchers and advocacy organizations studied alternative models of delivery of health care services. No single design for the delivery of health care appears uniquely desirable or appropriate. The varied conditions of rural, suburban, and urban living affect the pursuit of medical care. Depending on the circumstances, physicians in private practice, health maintenance organizations (HMOs), community health clinics, hospital-based clinics, home health services, or even developmental center-based outpatient care programs may all be appropriate.

After eight years of operation, one prepaid, managed care plan operated at Morristown Memorial Hospital seems to be effective. The core of the program is health care coordination by nurses, who link the patient to primary physician care and subspecialty care, ensure adequate followup, and complete the necessary paperwork.

New Jersey Medicaid recipients often have used costly and episodic emergency room and hospital-based outpatient programs for primary care. To help provide preventative care, continuity of care, and reduce costs, the New Jersey State Department of Human Services initiated the Garden State Health Plan, a Medicaid HMO, in which physicians are paid a monthly fee to provide care for enrolled patients. Physicians receive a set amount, regardless of the frequency of patient visits. The program may not best serve people with developmental disabilities, eligible by virtue of their disability, who may need more frequent visits to a physician to maintain adequate health. As designed, it may better serve the needs of the poor, who qualify for Aid for Dependent Children. To the credit of the New Jersey State Department of Human Services, it is studying the undesirable effects of the program.

Medical issues. Cross-sectional studies measuring the quality of health care services received by persons with developmental disabilities in New Jersey reveal that physicians need to be attentive to possible deficiencies in preventive care, primary care, and specialty services. For example, the staff of Morristown Memorial Hospital Disabilities Clinic surveyed the immunization status of 36 infants identified as being at risk for developmental delay and found that only 22 were appropriately immunized against pertussis. On a statewide basis, as many as 900 children in early intervention programs may be inadequately protected against pertussis.

While thyroid disease is a common problem in patients with Down's syndrome, this disorder often is overlooked. In a survey of 178 patients with Down's syndrome living in 16 New Jersey counties, 20.3 percent of patients were found to have previously unrecognized hypothyroidism or low thyroid reserve. Additionally, 1.5 percent of patients with Down's syndrome were noted to have hyperthyroidism.

While the assessment of thyroid function is well within the means of the general practitioner, access to echocardiography probably reflects access to medical subspecialists. In a survey of 157 people with Down's syndrome living in 15 New Jersey counties, 73 patients were noted to have either valvular or congenital heart disease. However, in 86 percent of these cases, cardiac findings previously had been unrecognized. The failure to provide antimicrobial prophylaxis to those patients with valvular lesions who receive dental care can be a significant problem.

RECOMMENDATIONS AND CONCLUSIONS

Until public policy changes, physicians can lead by personal example. Health care providers can express a greater willingness to serve this population—even if the issues of funding and integration of health care services remain unsolved. In addition, health care providers can develop an awareness of the special health care needs of this group and raise the level of expertise available in the community.

The Medical Society of New Jersey and other professional health care provider associations can shape the New Jersey health care system to better serve people with developmental disabilities. A policy panel described ten basic issues as central to the establishment of a successful health service system for people with mental retardation who live in the community (Table 2).

Increasing fees for service at prevailing market rates are necessary. Developing multiple options for the delivery of health care will require research and funding and joint planning by health care provider organizations.

Lastly, given the varied geographic distribution of health care resources, we must explore different models that utilize local resources to meet local needs. Health care providers must assume a greater responsibility in this planning process. ■

REFERENCES

1. Butler JA, Rosenbaum S, Palfrey J: Ensuring access to health care for children with disabilities. *N Engl J Med* 317:162-165, 1987.
2. Conroy JW: Medical needs of institutionalized mentally retarded persons: Perceptions of families and staff members. *Am J Ment Defic* 89:510-514, 1985.
3. Crocker A, Yankauer A: Basic issues. *Mental Retardation* 24:227-232, 1987.
4. Crocker A, Yankauer A: Symposium on community health care services for adults with mental retardation. *Ment Retardation* 25:189-242, 1987.
5. Friedman D, Kastner T, Pond W, O'Brien D: Thyroid dysfunction in individuals with Down's syndrome. *Arch Intern Med* (in press).
6. Garrard SD: Health services for mentally retarded people in community residences: Problems and questions. *Am J Public Health* 72:1226-1228, 1982.
7. Howard A: Utilization of health care services by persons with mental retardation in Massachusetts. Washington, DC, Association on Mental Retardation, 1988.
8. Luckhardt J, Scagnelli J: Recommendations for improving access to medical care for people with developmental disabilities. North Brunswick, New Jersey, New Jersey Association for Retarded Citizens, 1988.
9. McDonald EP: Medical needs of severely developmentally disabled persons residing in the community. *Am J Ment Defic* 90:171-176, 1985.
10. Merker EL, Wernsing DH: Medical care of the deinstitutionalized mentally retarded. *Am Fam Physician* 29:228-233, 1984.
11. Minihan PM, Dean D, Lyons CM: Providing care to patients with mental retardation: A survey of physicians in the state of Maine. AAMR Meeting, Chicago, IL, 1989.
12. Minihan PM: Planning for community physician services prior to deinstitutionalization of mentally retarded persons. *Am J Public Health* 76:1201-1205, 1986.
13. Rubin L: Health care needs of adults with mental retardation. *Ment Retardation* 25:201-206, 1987.
14. Schor EL, Smalky, KA, Neff JM: Primary care of previously institutionalized retarded children. *Pediatrics* 67:536-540, 1981.
15. Ziring PR, Kastner T, Friedman D, et al.: Provision of health care for persons with developmental disabilities living in the community; the Morristown model. *JAMA* 260:1439-1444, 1988.

1991 MSNJ ANNUAL MEETING

The Board of Trustees of the Medical Society of New Jersey approved the Committee on Annual Meeting's recommendation that the 1991 Annual Meeting be held at the Trump Taj Mahal Casino Resort in Atlantic City, on Sunday, April 28, through Wednesday, May 1, 1991. The Merv Griffin's Resorts Casino Hotel will participate with the headquarters hotel (Trump Taj Mahal) for the 1991 Annual Meeting. The daily schedule follows:

Saturday, April 27, 1991

3:30 p.m.	Board of Trustees' Meeting

Sunday, April 28, 1991

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
10:00 a.m.	Educational Programs
11:30 a.m.	Exhibits Open
1:30 p.m.	House of Delegates
3:30 p.m.	Reference Committee Meetings

Monday, April 29, 1991

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates (Election)
12:00 noon	Golden Merit Award Ceremony and Reception
2:30 p.m.	Reference Committee Meetings
5:00 p.m.	JEMPAC Political Forum
5:45 p.m.	JEMPAC Wine and Cheese Reception
6:30 p.m.	Union County Medical Society Reception

Tuesday, April 30, 1991

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates
1:30 p.m.	House of Delegates
7:00 p.m.	Inaugural Reception and Dinner honoring Doctor and Mrs. Joseph A. Riggs

Wednesday, May 1, 1991

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Educational Program
1:00 p.m.	Board of Trustees' Meeting

NOTEBOOK

UMDNJ NOTES

Record gift from individual. The largest gift from an individual, $3.5 million, has been made to the University of Medicine and Dentistry of New Jersey (UMDNJ) to support neurological genetic research and endow a chair in neurology. The gift, provided by William Dow Lovett of Jacksonville, Florida, through the Foundation of UMDNJ, will provide for scholarships, research, and patient services. The award will establish the William Dow Lovett Research Fund to support research on olivopontocerebellar atrophy, or OPCA, a hereditary degenerative disease of the nervous system. It also will endow the William Dow Lovett Professorship of Neurology. Dr. Roger C. Duvoisin, professor and chairman of neurology at UMDNJ-Robert Wood Johnson Medical School and an internationally renowned authority on Parkinson's disease and related disorders, will be the first faculty member to hold the chair.

High HIV-infection rate. UMDNJ-University Hospital has the highest seroprevalence rate of HIV infection among 26 hospitals in a nationwide study sponsored by the Centers for Disease Control (CDC). The 18-month CDC Sentinel Hospital Surveillance Study was designed to identify HIV-infection rates among asymptomatic patients in 39 hospitals in selected urban areas, but only 26 had a sufficient volume of HIV positive samples to be included in the findings. Seroprevalence of HIV infection was tested in blood samples obtained from patients admitted for reasons other than confirmed or suspected HIV infection or conditions frequently associated with HIV infection. These reasons include unexplained fevers and sexually transmitted diseases. Residual blood, collected for other laboratory tests, was used in the study. All patient identifiers—other than age, sex, race, and month of testing—were removed.

Nursing program going forward. Middlesex County College (MCC) and UMDNJ are moving ahead with plans to offer a new joint nursing program at MCC this fall. The decision to proceed followed an appellate court ruling reaffirming UMDNJ's right to participate in a joint degree program. Fifty students began classes at MCC in September. Although final approval by the New Jersey Board of Nursing was granted in June, efforts to implement the proposed joint progam were delayed by a lawsuit. The July 31 ruling in favor of the MCC/UMDNJ joint offering enabled student enrollment to proceed, although the decision may be challenged in the state supreme court.

Designed for maximum flexibility, the Joint Associate Degree in Nursing program incorporates two entry tracks: an accelerated path for licensed practical nurses and other qualified health care personnel, and a conventional path for high school graduates with no previous health care related education.

Students will be enrolled at MCC and will be charged MCC tuition and fees. Science and general education courses will be offered by MCC, while professional nursing courses will be provided by UMDNJ nursing faculty. All clinical assignments will be conducted at various Middlesex County acute health care facilities, as well as at long-term care and other specialized clinical facilities.

An associate in science (A.S.) degree in nursing will be awarded jointly by the two institutions. Graduates with the A.S. degree will be eligible to sit for the National Council Licensure Examination for Registered Nurses (NCLEX).

Researchers using artificial mouth. In an effort to develop longer lasting dental materials, UMDNJ has purchased a computer-controlled artificial mouth that revolutionizes dental research. The device—only the second of its kind to be utilized in the United States—significantly speeds up testing new materials for dental products such as crowns, bridges, and dentures. It was purchased by the UMDNJ-New Jersey Dental School's Biodental Materials Laboratory with a $267,000 grant from the National Institutes of Health. According to dental researchers, the device can accomplish in two weeks what would otherwise take five years. The accuracy of the device's chewing motion and its exacting measurement of the erosion of the materials are technologically unparalleled. It will help develop materials that, potentially, can last longer and perform better. That will mean great savings for both dentists and patients.

Stone Center first to gain license. The Stone Center of New Jersey, a state-of-the-art facility to treat kidney stones, is the first in the state to be licensed by the New Jersey Department of Health. The Center, a joint venture of UMDNJ-University Hospital and a UMDNJ affiliate, Saint Barnabas Medical Center in Livingston, uses sophisticated shock-wave technology to eliminate kidney stones in place of traditional major surgery. Located at UMDNJ's Newark campus, the Center has treated more than 3,000 patients since it opened in October 1987 as a demonstration project. One of three such projects in the state, the Stone Center has been licensed by the state under the guidelines set for an ambulatory care facility. ☐ Stanley S. Bergen, Jr, MD

MSNJ AUXILIARY

At the 1990 Annual Session of the AMA Auxiliary, the House of Delegates adopted a resolution sponsored by MSNJA. The resolution that became the policy of the AMAA encourages state and county auxiliaries to work with their legislators to draft and support legislation to deal more severely with those who operate boats or other powered vessels while under the influence of alcohol and other mind-altering substances.

In addition to the New Jersey resolution, the House of Delegates adopted eight other health-related resolutions resulting in the following policies: The AMAA encourages auxiliaries to urge physicians to ban smoking in offices; to work with educational associations and schools to encourage the development of mathematics and science skills of young people to increase the pool of qualified applicants to health professions educational programs; to support programs to educate the public on the dangers of hearing loss due to loud noise; to support educational and legislative programs to improve enforcement of seat belt laws, to improve seat belt design, and to improve instructions to parents concerning installation, use, certification, and recall of child safety seats; to promote the development of programs at police academies to teach interviewing skills and correct methods of dealing with children who are victims of child abuse; to support programs that increase awareness of the far-reaching effects of the U.S./Mexico border health problem and their potential impact on the health of Americans; and to increase public awareness of the need for a comprehensive school health education program for grades kindergarten through 12. The House of Delegates also adopted a resolution encouraging auxiliaries to work with resident physicians' spouse groups to establish programs that will help create a solid family base within the medical community and ensure membership of resident physicians' spouses at all levels of the federation after residency.

On the final day of the convention, Norma Skoglund of Oregon was installed as the 1990-1991 AMAA president. In her inaugural address, Mrs. Skoglund discussed the volunteer efforts of the medical community and the need for physicians and their spouses to take time to see the value of their service.

"Volunteerism always has made a difference when health and medical issues have troubled America," she said. "At the turn of the century, the enemy was yellow fever and cholera. Then TB and polio; now cancer and AIDS." And during all these years, noted Mrs. Skoglund, volunteers, including auxiliary members, have stood by physicians and researchers by raising funds for medical research and by supporting community health programs and education projects. The president added, "Physicians across the country also are volunteering their time not only for health and medical service but for community programs such as school boards, the arts, sports programs, and programs for the elderly and the homeless. Unfortunately, the public has not always seen the contributions physicians make outside the office setting. As physicians' spouses and volunteers in our medical auxiliaries, we can help dispel some of the criticism surrounding the medical community. By working with the media to highlight some of the volunteer efforts of physicians and their spouses in the community, I believe we will be able to foster better public relations for the medical profession." ☐ Marion H. Geib

PLACEMENT FILE

The following physicians have written to the executive offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information has been supplied by the physicians. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

INTERNAL MEDICINE

Anan Adnan Faidi, MD, 30 Charles St. W, Apt. 1717, Toronto, Ontario, IM4Y 1R5 Canada. Jordan 1983. Board certified. Also, board eligible (ENDOCRIN). Group. Available.

Suresh Reddy, MD, 3301 Cobblestone Cir., #6, Waterloo, IA 50703. Kakatiya (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

NUCLEAR MEDICINE

Haresh P. Solanki, MD, 3 West Elm St., Islip, NY 11751. MP Shah Medical College (Iran) 1980. Board eligible. Group or hospital-based. Available.

PHYSICAL MEDICINE AND REHABILITATION

Robert B. Thorne, MD, 112 Woodside Ave., Trenton, NJ 08618. Rutgers 1980. Board certified. Part time or full time. Available.

SURGERY

Donna Vecchione, MD, 27700 Bishop Park Dr., 4025, Willoughby Hills, OH 44092. SUNY-Stony Brook 1985. Board eligible. Partnership, solo, multispecialty group. Available.

PHILADELPHIA HEART INSTITUTE

of Presbyterian Medical Center

Cardiology Update

designed for the physician and provides an intensive survey of the current status of clinical cardiology . . .

Wednesday, November 7, 1990

Recent Advances in Diagnosis and Treatment of Acute MI

Moderator: William J. Untereker, M.D.

3:00-3:30	Typical and atypical clinical findings in acute myocardial infarction	*Charles Gottlieb, M.D.*
3:30-4:00	Early management: Thrombolytic agents, heparin, beta-blockers, nitrates, aspirin, etc. Which drugs and for whom?	*William J. Untereker, M.D.*
4:00-5:00	Case Presentations	*Marie-Noelle Langan, M.D.*
	Panel Discussion	
	William Corin, M.D.	*Norman Feinsmith, M.D.*
	Charles Gottlieb, M.D.	*Mariell Jessup, M.D.*
	Howard Rosner, D.O.	*William P. Santamore, Ph.D.*

- *Case Presentations and Panel Discussions*
- *CME Credits**
- *No Registration Fee*
- *Call for Reservation 662-8627*

Scheie Auditorium

Presbyterian Medical Center
39th & Market Streets
Philadelphia, Pennsylvania 19104

*The Philadelphia Heart Institute at Presbyterian Medical Center is an affiliate of the University of Pennsylvania.

Presbyterian Medical Center designates this continued medical education activity for 2 credit hours in Category I of the Physicians' Recognition Award of the American Medical Association and the Pennsylvania Medical Society Membership requirement. Nine sessions, 18 credits.

CONTINUING EDUCATION

ANESTHESIOLOGY

November

20 **Meeting**
6-9 P.M.—Ramada Inn, Clark
(New Jersey State Society of Anesthesiologists)

CARDIOLOGY

November

20 **Current Strategy in the Management of Arrhythmias**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

December

11 **What's New in Heart Failure**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

13 **Newer Cardiac Drugs**
8-9 P.M.—Centrastate Medical Center, Freehold
(AMNJ)

DERMATOLOGY

November

13 **Dermatology Meeting**
7-9 P.M.—Schering Corporation, Kennilworth
(Dermatological Society of New Jersey)

December

11 **Dermatology Meeting**
7-9 P.M.—Schering Corporation, Kennilworth
(Dermatological Society of New Jersey)

INFECTIOUS DISEASE

November

6 **Diagnosis and Treatment of AIDS**
8-9 A.M.—Underwood Memorial Hospital, Woodbury
(AMNJ and NJDOH)

6 **Psychotherapy with AIDS Patients**
8:30-10 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

8 **Issues and Perspectives: Neuropsychiatric and Psychosocial Aspects of AIDS**
8:30 A.M.-3:15 P.M.—Clarion Hotel, Edison
(UMDNJ)

12 **Identification and Management of HIV Infection**
1-2 P.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ)

December

7-8 **HIV and the Health Professional**
All day—UMDNJ-Newark
(UMDNJ)

MEDICINE

November

1-2 **Sinus Endoscopy**
7:30 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

3 **Obesity Update**
8 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

4 **Recent Advances in Colony-Stimulating Factors**
9 A.M.-1 P.M.—Ramada Renaissance, East Brunswick
(UMDNJ)

6, 13, 20, 27 **Grand Rounds**
8:30-10 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

7 **Emergency Medical Care**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

7 **Newer Concepts in Asthma Management**
1:30-2:30 P.M.—HIP/RCHP, New Brunswick
(RCHP and AMNJ)

8 **Annual Meeting**
8 A.M.-4 P.M.—Hyatt Regency, New Brunswick
(NJ Society of Critical Care Medicine)

8 **Diabetic Nephropathy**
11 A.M.-12 Noon—Hunterdon Developmental Center, Clinton
(AMNJ)

11 **Diabetic Nephropathy**
7-8 P.M.—Wallkill Valley General Hospital, Sussex
(AMNJ)

12 **Hyperalimentation**
12 Noon-1 P.M.—Warren Hospital, Phillipsburg
(AMNJ)

12 **Renal and Pancreatic Transplantation Update**
7-8 P.M.—Wallkill Valley General Hospital, Sussex
(AMNJ)

13 **Management Symposium**
7-9 P.M.—Schering Corporation, Kenilworth
(Dermatological Society of New Jersey)

14 **Coding Workshop**
9 A.M.-3 P.M.—MSNJ Headquarters, Lawrenceville
(Urology Society of New Jersey)

14 **Fall Refresher Course**
8 A.M.-4 P.M.—Sheraton Hotel, Woodbridge
(NJ Academy of Family Physicians)

14 **Cocaine Express**
9:15 A.M.-4:30 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

14 **Proper Use of Endoscopy**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

14 **Diabetic Nephropathy**
1:30-2:30 P.M.—Roosevelt Hospital, Metuchen
(AMNJ)

15 **Partial Hospitalization and Its Psychotherapeutic Role**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

15-17 **Third Conference on Radioimmunodetection and Radioimmunotherapy of Cancer**
All day—Princeton University, Princeton
(Center for Molecular Medicine and Immunology)

Deborah
Heart and Lung
Center

CLINICAL UPDATE PULMONARY MEDICINE

November 28, 1990

COURSE DESCRIPTION

The 7th Annual Clinical Update is designed to provide family practitioners, general internists, pulmonologists, and othe interested physicians with an updated review of pulmonary disorders which are commonly encountered in clinical practice as well as certain disorders which are of current topical interest. The program has been carefully selected to ensure a good blend of established and new methods and approaches to pulmonary diseases.

The morning session will provide participants with systematic approaches to tuberculosis in the HIV era, asthma, chronic obstructive pulmonary disease and sleep apnea.

The afternoon session will present current concepts in the staging and surgical treatment of lung cancer. A special lecture will focus on the expectations of surgical treatment of lung cancer. The role of computed tomography in assessment will be emphasized. Session will conclude with a discussion of postoperative pulmonary complications and their prevention.

Throughout the day, emphasis will be placed on risk factors, natural history, early detection, prognosis, newer diagnostic techniques and new methods of therapy.

A.M. MORNING SESSION

8:00 Registration
8:50 Welcome-*Vladir Maranhao, M.D.*
9:00 "HIV Infection: The Dominant Face of Tuberculosis"
Lee B. Reichman, M.D.
10:00 "Asthma: New Strategies in Diagnosis and Treatment"
Clifford W. Zwillich, M.D.
11:00 Coffee Break
11:15 "Evaluation and Therapy of COPD"
David M.F. Murphy, M.D.
12:00 "Recognition and Management of Sleep Apnea"
Clifford W. Zwillich, M.D.

P.M. AFTERNOON SESSION

12:50 Luncheon
1:40 Clara Falk Franks Lecture-"Staging of Lung Cancer in 1990"
Clifton F. Mountain, M.D.
2:40 "Computed Tomography in Lung Cancer"
Robert Daniel Pugatch, M.D.
3:30 Coffee Break
3:45 "Surgical Treatment of Non-Small Cell Carcinoma of the Lung"
Clifton F. Mountain, M.D.
4:45 "Reducing the Risk of Postoperative Pulmonary Complications"
Mervyn Feierstein, M.D.
5:20 Adjourn

GUEST FACULTY

CLIFTON F. MOUNTAIN, M.D., Professor of Surgery, Department of Thoracic Surgery, University of Texas School of Medicine at Houston, University of Texas Cancer Center, M.D. Anderson Hospital and Tumor Institute, Houston, Texas.

ROBERT D. PUGATCH, M.D., Associate Professor of Radiology, Department of Radiology, Harvard Medical School; Director of Thoracic Radiology, Brigham and Women's Hospital, Boston, Massachusetts.

LEE B. REICHMAN, M.D., Professor of Medicine, Director of Pulmonary Division, University of Medicine and Dentistry of New Jersey, Newark, New Jersey.

CLIFFORD W. ZWILLICH, M.D., Professor of Medicine and Chief, Pulmonary and Critical Care Medicine, Pennsylvania State University College of Medicine, Hershey, Pennsylvania.

LOCAL FACULTY

MERVYN FEIERSTEIN, M.D., Program Director, Attending Pulmonologist, Department of Pulmonary Medicine, Deborah Heart and Lung Center, Browns Mills, New Jersey.

VLADIR MARANHAO, M.D., Clinical Associate Professor of Medicine, UMDNJ-Robert Wood Johnson Medical School, New Brunswick, New Jersey; Vice President, Medical Affairs, Deborah Heart and Lung Center, Browns Mills, New Jersey.

DAVID M.F. MURPHY, M.D., Program Chairman, Department of Pulmonary Medicine, Deborah Heart and Lung Center, Browns Mills, New Jersey.

SEVENTH ANNUAL CLINICAL UPDATE IN PULMONARY MEDICINE

Wednesday, November 28, 1990

Sponsored by:

Deborah Heart and Lung Center
Browns Mills, New Jersey
(609) 893-6611

NAME________________________________

ADDRESS______________________________

CITY/STATE____________________ ZIP__________

SPECIALTY____________________ PHONE (_____)__________

Tuition: All participants, fee includes luncheon and refreshments—$95.00.

A check in the amount of $95.00 payable to Deborah Heart and Lung Center should accompany this application. Mail to Pulmonary Department, Deborah Heart and Lung Center, Browns Mills, N.J. 08015.

Due to limited seating capacity, early registration is strongly advised. Registration deadline—Wednesday, November 14, 1990.

Accreditation: Deborah Heart and Lung Center designates that this continuing medical education offering meets the criteria for 7.0 credit hours in category 1 of the Physician's Recognition Award of the American Medical Association.

This program has been reviewed and is acceptable for 7.0 prescribed hours by the American Academy of Family Physicians.

For Program Information please call: Mrs. Diane Colby (609) 893-6611.

17 **The Breast**
8 A.M.-2 P.M.—Sheraton Poste Inn, Cherry Hill
(Cooper Hospital/University Medical Center)

17 **Office Computer Seminar**
8 A.M.-4 P.M.—Hyatt Regency Hotel, New Brunswick
(MSNJ and AMNJ)

17 **Slide Seminar: Bone Marrow and Spleen**
9 A.M.-1 P.M.—Robert Wood Johnson Medical School, New Brunswick
(NJ Society of Pathologists)

20 **Chronic Epstein-Barr Virus**
8-9 A.M.—Underwood Memorial Hospital, Woodbury
(AMNJ)

21 **Diabetic Nephropathy**
9-10 A.M.—Warren Hospital, Phillipsburg

26 **Sports Medicine**
5:30-8 P.M.—Robert Wood Johnson Medical School, New Brunswick
(UMDNJ)

27 **Parkinson Disease**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

28 **Clinical Update in Pulmonary Medicine**
8 A.M.-5:20 P.M.—Deborah Heart and Lung Center, Browns Mills
(Deborah Heart and Lung Center)

28 **New Practice Program**
8 A.M.-3:30 P.M.—MSNJ Headquarters, Lawrenceville
(MIIENJ)

30 **Hypnosis in Couples and Family Therapy**
8:30-4:30 P.M.—UMDNJ, Newark
(UMDNJ)

30 **Sickle Cell Disease**
12 Noon-1 P.M.—Mercer Medical Center, Trenton
(Mercer Medical Center)

December

1 **39th Annual Clinical Meeting**
8:30 A.M.-4:30 P.M.—Robert Wood Johnson Medical School, Piscataway
(American College of Surgeons and AMNJ)

4 **Grand Rounds**
11 8:30-10 A.M.—Elizabeth General
18 Medical Center, Elizabeth
25 *(Elizabeth General Medical Center)*

4 **Nephrotoxicity of Common Drugs**
8-9 A.M.—Underwood Memorial Hospital, Woodbury
(AMNJ)

4 **Case Presentation**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

5 **Septic Shock**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

5 **Clinical Abstract Meeting**
1:30-5 P.M.—The Manor, West Orange
(Oncology Society of New Jersey)

5 **Legal Liability for T.D.**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

12- **CO_2 Laser Surgery**
13 7:30 A.M.-4:30 P.M.—UMDNJ, Newark
(UMDNJ)

12 **Critical Care Topics**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

12 **Prevention of Lower Extremity Amputations**
1:30-2:30 P.M.—Roosevelt Hospital, Metuchen
(AMNJ)

13- **Sinus Endoscopy**
14 7:30 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

13 **Doctor/Patient Sex and Medicolegal Issues**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

13 **New Developments in Emergency Medical Care in New Jersey**
12 Noon-1 P.M.—Community Medical Center, Toms River
(AMNJ)

18 **Evaluation of Cholesterol Awareness**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

19 **Aspiration Syndrome in the Mentally Retarded**
9-10 A.M.—Warren Hospital, Phillipsburg
(AMNJ)

19 **Strokes**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

21 **Prevention of Lower Extremity Amputations**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(AMNJ and NJDOH)

OBSTETRICS/GYNECOLOGY

November

2 **Semi-Annual Meeting**
8 A.M.-5 P.M.—Sheraton Meadowlands Hotel, Secaucus
(NJ Obstetrical and Gynecological Society)

4- **Fifth Annual Issues and**
7 **Controversies in Ob/Gyn**
7 A.M.-1 P.M.—Contemporary Hotel, Walt Disney World
(UMDNJ)

17 **The Breast**
8 A.M.-2 P.M.—The Sheraton Poste Inn, Cherry Hill
(Cooper Hospital/University Medical Center)

December

13- **CO_2 Laser Applications**
15 **in Ob/Gyn**
8 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

ONCOLOGY

November

15 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(AMNJ)

30 **Breast Cancer: Risks and Controversies**
8:45 A.M.-4:15 P.M.—UMDNJ-Robert Wood Johnson Medical School, New Brunswick
(UMDNJ)

December

13 **Meeting: Head and Neck Oncology Section**
6:30-9:30 P.M.—The Hyatt, New Brunswick
(AMNJ)

SPECIAL ISSUE:

Medical Research in New Jersey

November 1990

Hahnemann University

Department of Medicine

GRAND ROUNDS WEDNESDAYS

8:30 a.m.-9:30 a.m.

October-December, 1990

OCTOBER, 1990

October 3, 1990
PITUITARY ADENOMAS: DIAGNOSIS AND TREATMENT
Peter Snyder, MD
Associate Professor of Medicine
Division of Endocrinology
University of Pennsylvania School of Medicine
Philadelphia, PA

October 10, 1990
CHANGING PATTERNS OF AIDS AND THE LUNGS
Philip C. Hopewell, MD
Professor of Medicine
University of California, SF
Chief, Chest Service, San Francisco General Hospital, CA

October 17, 1990
DIVISION OF CARDIOLOGY CLINICAL RESEARCH: CARDIAC IMAGING
Eric L. Michelson, MD
Professor of Medicine
Director, Division of Cardiology
Hahnemann University

October 24, 1990
CARDIAC REMODELING: CLINICAL IMPLICATIONS AND THERAPEUTIC OPTIONS
Gervasio A. Lamas, MD
Assistant Professor of Medicine
Harvard Medical School, Boston, MA

October 31, 1990
DIABETIC NEPHROPATHY
Eli A. Friedman, MD
Professor of Medicine
Chief, Division of Renal Disease
SUNY Health Science at Brooklyn, NY

NOVEMBER, 1990

November 7, 1990
STEROID ABUSE IN THE ATHLETE
Robert Cantu, MD
Chairman of Surgery
Director, Services of Sports Medicine
Emerson Hospital, Concord, MA
Consultant, Sports Medicine Committee
USA American Boxing Federation

November 14, 1990
CONTROVERSIES IN NON-CARDIAC CHEST PAIN (Gastro-Esophageal Reflux, Achalasia)
Sidney Cohen, MD
Professor and Chairman of Medicine
Temple University School of Medicine
Philadelphia, PA

November 21, 1990
AGING OF THE SKIN
Richard L. Speilvogel, MD
Professor of Medicine and Dermatology
Director, Division of Dermatology
Hahnemann University

November 28, 1990
MEDICAL MANAGEMENT OF DEPRESSION AND ANXIETY
Gary Tollefson, MD, PhD
Associate Professor of Psychiatry
University of Minnesota, MN
Jonathan O. Cole, MD
Chief, Psychopharmacology Program
McLean Hospital, Belmont, MA

DECEMBER, 1990

December 5, 1990
PTCA VS BYPASS GRAFT SURGERY FOR CORONARY ARTERY DISEASE
William S. Frankl, MD
Vischer Professor of Medicine and Chairman,
Department of Medicine
Director, Likoff Cardiovascular Institute
Hahnemann University

December 12, 1990
ABNORMALITIES OF THROMBOSIS AND THROMBOEMBOLISM
Daniel Deykin, MD
Chief of Medicine, Director, Health Services
Research and Development
Boston VA Medical Center, MA

December 19, 1990
DIVISION OF PULMONARY MEDICINE AND CRITICAL CARE
Edward Schulman, MD
Associate Professor of Medicine
Director, Division of Pulmonary and Critical Care Medicine
Hahnemann Universtiy

WEDNESDAY MEDICAL SEMINAR SERIES

8:30 a.m.-3:30 p.m.

October 10, 1990
AIDS TREATMENT

November 7, 1990
MEDICINE IN ATHLETICS

November 28, 1990
MEDICAL MANAGEMENT OF DEPRESSION AND ANXIETY

December 12, 1990
ABNORMALITIES OF THROMBOSIS AND THROMBOEMBOLISM

Seminar Directors:

William S. Frankl, MD
Professor of Medicine
and Chairman
Department of Medicine

Allan B. Schwartz, MD
Professor of Medicine
Director, Continuing
Medical Education for the
Department of Medicine

Location:
Classroom C (Alumni Hall)
2nd Fl. New College Bldg.
Hahnemann University
15th Street Entrance
15th & Vine Streets
Philadelphia, PA

As an organization accredited by the Accreditation Council for Continuing Medical Education (ACCME), Hahnemann University designates this continuing medical education activity as Category 1 of the Physician's Recognition Award of the American Medical Association. One credit hour may be claimed for each hour of participation by the individual physician.

For Information, call the Office of Continuing Education at (215) 448-8263

14 **Cancer Committee/Tumor Board Conference**
11 A.M.-12 Noon—Wallkill Valley Hospital, Sussex
(Wallkill Valley Hospital and AMNJ)

27 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(AMNJ)

PEDIATRICS

November

13 **The Wayward Adolescent**
8:30-10 A.M.—Elizabeth General Medical Center
(Elizabeth General Medical Center)

December

7-8 **Pediatric Advanced Life Support**
7:30 A.M.-3:30 P.M.—Shore Memorial Hospital, Somers Point
(AMNJ)

PSYCHIATRY

November

1 **Research Update: Adolescence**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

6 **Psychiatry Grand Rounds**
13 8:30-10 A.M.—Elizabeth General
20 Medical Center, Elizabeth
27 *(Elizabeth General Medical Center)*

7 **Treatment Plan and Goal Setting in Psychiatric Patients**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

8 **Psychopathology as Predictor of Treatment Outcome in Alcoholics**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

14 **Cocaine Express**
All day—Carrier Foundation, Belle Mead
(Carrier Foundation)

15 **Partial Hospitalization and its Psychotherapeutic Role**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

21 **Early Office Recognition of Depression**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

27 **Adoption: Psychological Issues**
8:30-10 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

30 **Treatment of Borderline Personality Disorder with Self-Destructive Behavior**
10-11 A.M.—Marlboro Psychiatric Hospital, Marlboro
(AMNJ)

December

4 **Psychiatry Grand Rounds**
11 8:30-10 A.M.—Elizabeth General
18 Medical Center, Elizabeth
25 *(Elizabeth General Medical Center)*

6 **Therapist Response to the Suicide of a Patient**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

8 **Fragmentation of the Self in Schizophrenia**
8:30-10 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

11 **MICA Patients**
8:30-10 A.M.—Elizabeth General Medical Center, Elizabeth
(Elizabeth General Medical Center)

13 **Borderline Syndrome: Doctor/Patient Sex and Medicolegal Issues**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

20 **Psychotherapeutic Approaches for Healing the Shame and Silence of the Sexually Abused**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

RADIOLOGY

November

15 **Radiology Meeting**
Saint Barnabas Medical Center, Livingston
(Radiology Society of New Jersey/AMNJ)

December

20 **Radiology Meeting**
Saint Barnabas Medical Center, Livingston
(Radiology Society of New Jersey/AMNJ)

UROLOGY

November

8 **Grand Rounds**
15 7-9 P.M.—Robert Wood Johnson
29 Medical School, Piscataway
(UMDNJ)

December

6 **Grand Rounds**
13 7-9 P.M.—Robert Wood Johnson
20 Medical School, Piscataway
(UMDNJ)

ARE YOU MOVING?

If so, please send a change of address to *NEW JERSEY MEDICINE*, Medical Society of New Jersey, Two Princess Road, Lawrenceville, NJ 08648, at least six weeks before you move.

Name ______________________________

Old Address ______________________________

City ______________ State ________ Zip ________

New Address ______________________________

City ______________ State ________ Zip ________

Acupuncture & Electro-Therapeutics in Clinical Practice

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References:
1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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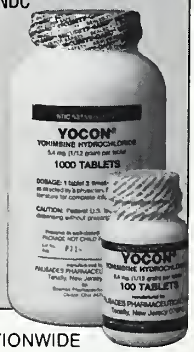

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IN MEMORIAM

George Babcock, Jr. Born in Newark on April 26, 1916, George Babcock, Jr., MD, died on February 26, 1990, at the age of 73. Dr. Babcock earned his medical degree from Western Reserve University School of Medicine, Cleveland, Ohio, in 1947, received his New Jersey medical license the following year, and served an internship at East Orange General Hospital. Board certified in allergy and immunology, Dr. Babcock maintained a private practice in East Orange and Wayne. Dr. Babcock was on the staff at the former Riverside Hospital, Boonton, and at Chilton Memorial Hospital, Pompton Plains. He was employed by Schering Corporation, Bloomfield, and by Ives Laboratories, Inc., New York. Dr. Babcock served in the United States National Reserves from 1943 to 1945. Dr. Babcock was a fellow of the American College of Allergy, of the American Academy of Allergy, and of the American Geriatric Society. In addition, Dr. Babcock was a member of our Morris County component and of the American Medical Association.

Anselmo J. Brache. General surgeon, Anselmo Joseph Brache, MD, died on June 21, 1990, at the age of 59. Born in the Dominican Republic on March 12, 1931, Dr. Brache received his medical degree from Santo Domingo University Faculty of Medicine in 1955. After serving an internship at St. Elizabeth Hospital and residencies at Bayonne Hospital, Jersey City Medical Center, and Metropolitan Hospital Center, New York, Dr. Brache received his New Jersey medical license in 1966. Dr. Brache had his private surgical practice in Bayonne for over 25 years and was affiliated with Bayonne Hospital. For many years, Dr. Brache was a member of the American Medical Association and of our Hudson County component.

Louis E. De Simone. Asbury Park resident Louis Edward De Simone, MD, died July 2, 1990, at the age of 72. Born in Boston on October 31, 1917, Dr. De Simone received his medical degree from St. Louis University School of Medicine in 1943 and his New Jersey medical license in 1946. A general practitioner, Dr. De Simone had his practice in Asbury Park for many years. He was affiliated with several area hospitals: Monmouth Medical Center, Long Branch, and Jersey Shore Medical Center, Neptune. Dr. De Simone served as a Wall Township school physician for 35 years and as a school physician for Mount Carmel Parochial School. Dr. De Simone was a physician for Central Railroad of New Jersey. Dr. De Simone was a medical examiner for numerous insurance companies. Dr. De Simone served in the United States Army during World War II from 1944 to 1945 as captain. Dr. De Simone was a member of the American Medical Association and of our Monmouth County component.

Young M. Kim. Pathologist Young Mook Kim, MD, died on October 17, 1989, at the age of 74. Born in Korea on August 15, 1915, Dr. Kim earned his medical degree from Tokyo Medical College, Japan, in 1941 and received his Japan medical license in 1942 and his Korean medical license in 1952. Dr. Kim served an internship and residency at Tokyo Medical College and maintained a private practice in Korea before coming to the United States. After serving an internship at St. Mary's Hospital, Passaic, and residencies at St. Mary's Hospital, The Mountainside Hospital, Montclair, and General Hospital Center at Passaic, Dr. Kim received his New Jersey medical license in 1963. Dr. Kim was affiliated with Presbyterian Hospital, Newark, and Newark Beth Israel Medical Center and was a professor of pathology at the School of Dentistry, Fairleigh Dickinson University, Rutherford. Dr. Kim served as captain in the Korea Medical Corps from 1952 to 1953. Dr. Kim was a member of the Korea Medical Society, of the Japan Medical Society, of our Essex County component, and of the American Medical Association.

Harry B. Lochhead. A member of our Gloucester County component, Harry Burton Lochhead, MD, died on July 14, 1990, at the age of 83. Born in West Pittston, Pennsylvania, on April 5, 1907, Dr. Lochhead earned his medical degree from Temple University School of Medicine, Philadelphia, in 1935, and his New Jersey medical license in 1954. Board certified in clinical pathology and pathologic anatomy, Dr. Lochhead practiced in Woodbury and was affiliated with Underwood-Memorial Hospital, Woodbury. In the early 1950s, Dr. Lochhead coauthored several articles. Dr. Lochhead was a member of the American Medical Association, an emeritus member of the Medical Society of New

Jersey, and a fellow of the American Society of Clinical Pathology. Dr. Lochhead was a major in the U.S. Army from 1942 to 1946.

Helen L. Miller. Born in Cornvallis, Oregon, on June 27, 1896, Helen Lovena Miller, MD, died on June 18, 1990, at the age of 93. In 1926, Dr. Miller earned her medical degree from the University of Oregon Medical School, Portland. Dr. Miller received her New Jersey, New York, and Oregon medical licenses. Dr. Miller interned at New York Infirmary-Beekman Downtown Hospital, New York. A general practitioner, Dr. Miller had her practice in Kinnelon and was affiliated with Kinnelon Medical Center prior to her retirement in 1989. She was a member of our Morris County component, of the New York County Medical Society, and of the American Medical Association. Dr. Miller was past-president of the New York State Women's Medical Society.

Robert T. Miller. Word has been received of the death of Robert Thomas Miller, MD, on June 3, 1990. Born on August 22, 1926, in Bayonne, Dr. Miller received his medical degree from George Washington University School of Medicine, Washington, DC, in 1953. Dr. Miller received his Connecticut medical license in 1954, his New Jersey medical license in 1957, and his New York medical license in 1959. Dr. Miller interned at Hackensack Medical Center and served his residency at Yale-New Haven Hospital, New Haven, Connecticut. Dr. Miller practiced obstetrics-gynecology in Oradel and Cape May Court House and was affiliated with Hackensack Medical Center; Pascack Valley Hospital, Westwood; Valley Hospital, Ridgewood; and Burdette Tomlin Memorial Hospital, Cape May Court House. Dr. Miller served in the United States military from 1944 to 1946. Dr. Miller was a member of our Bergen County and Cape May components and of the AMA. Dr. Miller also was a fellow of the American College of Obstetricians and Gynecologists.

Harry M. Poppick. One of the founding physicians of Bayshore Community Hospital, Holmdel, Harry M. Poppick, MD, died June 24, 1990, at the age of 73. Born in New York City on June 5, 1917, Dr. Poppick attended the University of Colorado School of Medicine, earning his medical degree in 1951. Dr. Poppick received his New Jersey, Colorado, and Arizona medical licenses. Dr. Poppick interned at Metropolitan Hospital Center, New York City. Prior to relocating to Keyport over 30 years ago, Dr. Poppick lived in Brooklyn and Denver. Dr. Poppick was affiliated with several area hospitals: Riverview Medical Center, Red Bank; Monmouth Medical Center, Long Branch; and Bayshore Community Hospital. In addition to his private general practice, Dr. Poppick was a Madison Township school physician and a professor of family practice at UMDNJ-Robert Wood Johnson Medical School, New Brunswick. Dr. Poppick served on the Raritan Township Board of Health as vice-president; and on the Bayshore Community Hospital Board of Trustees since 1985. Dr. Poppick was a fellow of the American Academy of General Practice and a member of our Monmouth County component. An avid reader, Dr. Poppick was a contributing book reviewer for *NEW JERSEY MEDICINE*. In 1987, Dr. Poppick was named most distinguished physician at Bayshore Community Hospital. He was a first lieutenant in the U.S. Army, serving in the Chemical Warfare Service from 1942 to 1947 and in the Medical Corps Reserve from 1950 to 1952.

D. Joseph Terreri. After a short illness, D. Joseph Terreri, MD, died on April 13, 1990, at the age of 82. Dr. Terreri was born on January 19, 1908, in Morristown. In 1934, Dr. Terreri received his medical degree from Loyola University School of Medicine, Chicago, and his New Jersey medical license. Dr. Terreri received his obstetrics training at the former Margaret Hague Maternity Hospital and at St. Francis Hospital, both in Jersey City. Dr. Terreri practiced obstetrics and gynecology in Morristown for many years until his retirement in 1980. He was affiliated with the former All Souls Hospital, Morristown, and with St. Clare's Riverside Medical Center, Denville. For 17 years, Dr. Terreri was a physician for the Morris County Jail. Dr. Terreri was a member of our Morris County component and of the American Medical Association. He received the Golden Merit Award from the Medical Society of New Jersey. Terreri served as captain in the United States Army Medical Corps from 1942 to 1946.

James Z. Zolli. At the untimely age of 47, James Zeno Zolli, MD, died on July 8, 1990. Dr. Zolli was born in New York City on June 19, 1943, earning his medical degree from State University of New York Downstate Medical Center, Brooklyn, in 1970; his New York medical license in 1973; and his New Jersey medical license the following year. Dr. Zolli served his internship and residency at State University Kings County Hospital Center, Brooklyn. An ophthalmologist, Dr. Zolli practiced in Elizabeth, Newark, and Springfield and was affiliated with Newark Eye and Ear Infirmary; St. Elizabeth Hospital, Elizabeth; St. James Hospital, Newark; and Alexian Brothers Hospital, Elizabeth. Dr. Zolli was a member of our Union County component. He also was a fellow of the American Academy of Ophthalmology and Otolaryngology, and of the American College of Surgeons. Dr. Zolli was an assistant clinical professor at the University of Medicine and Dentistry of New Jersey, Newark.

EDITORIAL CRITERIA

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Content. The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports; review articles; clinical notes; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and opinions. Editorials are prepared by the editor and by guest contributors on timely and relevant subjects. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevant to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made to an audience in New Jersey.

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The author should submit a 30-word abstract.

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1. Goldwyn RM: Subcutaneous mastectomy. *NJ MED* 74:1050-1052, 1977.
2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

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First in a series

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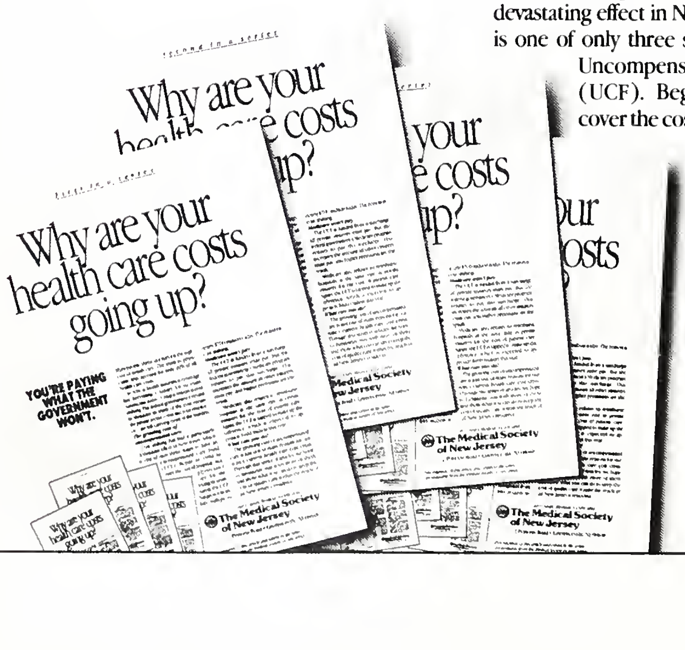
YOU'RE PAYING WHAT THE GOVERNMENT WON'T.



Why are your health care costs going up?

YOU'RE PAYING WHAT THE GOVERNMENT WON'T.

The Medical Society of New Jersey

Many people blame doctors for the high cost of health care. The truth is, physicians' fees account for only 20% of all health care costs.

So why is health insurance coverage fast becoming a luxury for so many Americans today? A major reason is cost shifting. The federal government's refusal to shoulder its share of the cost means the private sector—you and your employer—are left carrying more of the burden.

The growing cost of uncompensated care

Cost shifting has had a particularly devastating effect in New Jersey, which is one of only three states to have an Uncompensated Care Fund (UCF). Begun in 1980 to cover the cost of hospital (not physician) care for the indigent uninsured, the UCF has grown from $80 million to nearly $700 million today. The reason is cost shifting.

Medicare won't pay

The UCF is funded from a surcharge all private insurers must pay. But the federal government's Medicare program refuses to pay this surcharge. This increases the amount all other insurers must pay, and higher premiums are the result.

Medicare also refuses to reimburse hospitals at the same rate as private insurers for the cost of patient care. Again, the UCF is tapped to make up the difference, which is expected to approach $400 million this year.

What you can do

The growing cost of uncompensated care is just one of many reasons for our state's current health care cost crisis. Through this series of articles, we hope to familiarize you with more of them and show what you can do to keep the cost of quality care within the reach of all New Jersey's residents.

Your County Medical Society and

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Free reprints of this article and others in the series are available from the Medical Society of New Jersey.

NEWSWATCH

CLINICAL LABORATORY IMPROVEMENT AMENDMENTS: 1988

As a result of AMA action and physician opposition, over 50,000 comments were received by the Federal Health Care Financing Administration (HCFA) regarding the proposed regulations on physician office laboratories. HCFA must evaluate and respond to the comments and, in addition, must perform a regulatory impact study before adopting the onerous proposal. The AMA expects significant changes will be made before final action is taken.

MEDICARE TO PAY ASSISTING SURGEONS

Through a series of negotiations between Dr. Ricci (Pennsylvania Blue Shield) and Dr. Samson (MSNJ-American College of Surgeons), most issues regarding reimbursement for assisting surgeons have been resolved. The PBS format is compatible with the State Board of Medical Examiners with the exception of a few hernia procedures still being reviewed.

1991 MALPRACTICE RATES--MIIENJ

The Medical Inter-Insurance Exchange of New Jersey (MIIENJ) has announced its 1991 malpractice rates. Classes J (gynecology and general surgery); K (plastic, cardiac, thoracic, and vascular surgery); and N (orthopedics) will enjoy a 9.67 percent decrease. All other classes will remain at the 1990 levels. Additionally, the Board of Governors has suspended the subordinated loan requirement for all new insureds and has petitioned the insurance commissioner for permission to begin redeeming outstanding subordinated loans.

The commissioner has not yet acted on that request. The 1991 rates, to be used for renewals in January, will be effective November 1, 1990, for new business.

GOVERNOR'S COMMISSION FILES ITS REPORT

The Governor's Commission on Health Care Costs filed a sweeping report with the governor and the Legislature calling for a total revision of the health care delivery and reimbursement system in New Jersey. In most instances, the details necessary to implement the concepts presented are not given. A serious number of practical and constitutional questions are presented by the speculation caused by that omission. The Commission did not give substantial weight to practitioner and industry comments. The governor and the Legislature will begin consideration of legislative and regulatory proposals. MSNJ is prepared fully to address all concerns and to represent patient and physician interests in what will become a dramatic and probably heated process.

LITIGATION: MALPRACTICE SURCHARGE AND NO-FAULT

The medical malpractice surcharge suit was argued by MSNJ special counsel Herbert Stern before the appellate division on September 17, 1990; a decision is expected by the end of November 1990. The automobile insurance litigation continues through a procedural maze with the temporary restraining order still in effect. MSNJ is represented by Robert Conroy, of the firm of Kern, Augustine, Conroy & Isele.

MSNJ NEWSLETTER

CALL FOR PAPERS: SPECIAL ISSUE ON COMPUTERS

NEW JERSEY MEDICINE invites interested persons to submit articles for a special issue on Computers and Medicine to be published in spring 1991. Under the guest editorship of Richard M. Ball, MD, this special issue will cover a variety of topics directed toward computer use by the physician. Specific topics for articles might include: using on-line medical databases; getting physicians to use computers; subscribing to computer journal information lines; drug interaction programs; coding software; radiologic imaging; computer-assisted learning and testing; computer-stored medical records; doctors as programmers; and personal experiences with office business computer systems. Please send your inquiries or manuscripts to Richard M. Ball, MD, 1907 Park Avenue, South Plainfield, NJ 07080.

REGULATION FOR OCCUPATIONAL DISEASES AND POISONINGS

Under a new regulation, N.J.A.C. 8:57-3.2, physicians attending any person who is ill or diagnosed with any of the diseases or poisonings on the following list must report the case within 30 days to the New Jersey State Department of Health: asbestosis; silicosis; pneumoconiosis, other or unspecified; occupational asthma; extrinsic allergic alveolitis; and lead poisoning, adult (blood lead ≥ 25 micrograms per deciliter; urine lead ≥ 80 micrograms per liter). The required case report should include the following information on the patient: diagnosis, date of onset of illness, name, birthdate, sex, home address, telephone number, and name and address of employer at the time of exposure.

Reports may be submitted by telephone (609/984-1863) or mailed to "SENSOR" Occupational Health Service, New Jersey State Department of Health, CN 360, Trenton, New Jersey 08625-0360. Reporting forms and a copy of the new regulation may be obtained from this address.

Reports will be included in the New Jersey State Department of Health's surveillance system for occupational diseases and poisonings. The goal of this surveillance system is prevention through case identification and followup at worksites where workers may continue to be exposed to the hazards that caused disease in the reported case.

MEDICARE PAYMENT HOLD IS UNFAIR

The AMA firmly opposes the 14-day hold in payment by Medicare carriers and told the Health Care Financing Administration (HCFA) that this delay is unfair and imposes hardships on physicians and patients. The federal government benefits from this lag in payment at the expense of Medicare patients, the AMA said. This legislatively mandated hold on payment attempts to balance the budget on the backs of those who are supposed to be protected by Medicare. Carriers should pay claims promptly and efficiently, the AMA told HCFA.

NATIONAL PRACTITIONER DATA BANK

James S. Todd, MD, AMA executive vice-president, met with Representative Ron Wyden (D-OR) to resolve some of the tough problems involved in implementing the National Practitioner Data Bank. The AMA raised a number of concerns about data bank operations that could adversely affect physicians: inconsistent reporting of medical liability determinations; inappropriate data retention; and inadequate confidentiality protections. A new AMA booklet explains the Data Bank's implications for physicians. *The National Practitioner Data Bank, Information for Physicians* describes the Data Bank and clarifies reporting and querying requirements. To order, call 1/800/262-3211; free to AMA members.

ANTI-HASSLE BILL The AMA-sponsored Medicare "anti-hassle" reform bill, HR-4475, now has 169 cosponsors in the U.S. House of Representatives. The bill contains five major reforms that would reduce the hassles you face from third-party interference in your practice. Call or write your Congressional representatives and urge them to support HR-4475 in the House and S-2591 in the Senate. Call 202/224-3121 and ask for your senator or representative by name.

LABORATORY REGULATIONS Proposed cytopathology regulations on physician office laboratories are an unprecedented intrusion into the practice of medicine, the AMA told the Health Care Financing Administration (HCFA). The AMA objects to including physicians in the proficiency testing requirements of these regulations. Not only could these rules deny a physician the right to practice medicine if the physician fails to pass a cytology proficiency test, the rules also may violate state regulation of medical licensure, the AMA told HCFA. Additionally,the rules will lead to inspection and proficiency testing problems. The AMA cautioned that these regulations are bad for patients too. In rural areas, small laboratories may have to close. And if the new rules are not modified, the availability of many services could be severely jeopardized, the AMA asserted.

AMA SUPPORTS TORT REFORM The AMA favors many of the medical liability reforms proposed by the federal government in "Report on Health Care for All Americans." Federal tort reform must be part of any viable plan to expand access to quality care, stated the AMA. In a recent letter to Congress, the AMA spelled out the tort reforms it wants for fair disposition of liability claims: periodic payment of damages; a $250,000 cap on noneconomic damages; offset of other sources of payment for damages; a sliding scale of attorney contingent fees; and a statute of limitations for minors of no more than six years from birth. The AMA also wants federal funding of state demonstrations to find alternative ways of resolving disputes.

DESIGNATED SPECIALTY REIMBURSEMENT The AMA is demanding that the new "designated specialty" Medicare payment limitations be recalled. Before implementing these limits, the Health Care Financing Administration (HCFA) should have given physicians proper notice and also should have published the criteria used in choosing the so-called "high volume" services subject to these limits. A comment period also should have been allowed. The AMA told HCFA that Medicare payment limits for "over-valued" services might affect some of the same physicians hit with designated specialty payment cuts. Some physicians could face two devastating payment cuts at once and might be discouraged from treating Medicare patients, the AMA said.

PHYSICIAN SUES ATTORNEY A New Jersey physician, Bernard E. Benson, MD, filed a legal malpractice suit against an attorney who allegedly failed to properly represent him in a malpractice suit. A trial court in Philadelphia ruled the doctor had no grounds to sue Philadelphia attorney James Griffith. The doctor filed an appeal and the AMA filed a friend of the court brief on his behalf. A state appellate court reinstated the case and declared that the doctor is entitled to have his case heard. Dr. Benson said he suffered more than $1 million in damages because Griffith failed to have court records sealed after settling a malpractice suit against Dr. Benson.

ALLIED HEALTH EDUCATION

The MSNJ House of Delegates called for recognition and support for all levels of allied health education at the 1990 Annual Meeting, and the Task Force on the Shortage of Nurses and Technical Personnel submitted a proposal to the Board of Trustees. Part of the Task Force response was to make a series of recommendations for the edification and guidance of physicians. The Board of Trustees approved the following recommendations on September 16, 1990:

In support of allied health education

RECOMMENDATION

That members of the Medical Society of New Jersey be urged:

(a) To distribute and to make available in their offices, hospitals, and clinics, pamphlets and brochures concerning careers and educational programs in the allied health professions. (Such pamphlets are available from the New Jersey Hospital Association Nursing and Allied Health Resource Center.)

(b) To make informed educational referrals for students, patients, and others where appropriate toward careers in the allied health professions.

(c) To participate in and to support the allied health educational programs in their area.

(d) To support legislation for allied health programs in New Jersey.

In support of job retention and recruitment

RECOMMENDATION

That members of the Medical Society of New Jersey be urged:

(a) To support appropriate salary levels for allied health professionals.

(b) To include the allied health professional in an appropriate level of discussion concerning patients and procedures.

(c) To respect the allied health professional as an essential and endangered member of the health care team.

MALPRACTICE REFORM BILL INTRODUCED

Senator Orrin Hatch (R-UT) has introduced a bill that could reduce the number of medical malpractice lawsuits and amounts awarded from such suits. Hatch's bill would provide funding for states to establish systems of binding arbitration that would limit noneconomic damages to $250,000 and require states to review and resolve patients' claims within six months. Funding of $5 million would be provided in 1991 with up to $200 million in 1992 and $75 million in 1993 being provided. The bill has received broad-based support from the health care industry, including the American Hospital Association, the American Medical Association, and the Federation of American Health Systems.

MEDICARE HMO QUALITY PROBLEMS

California Medical Review Inc., the country's largest peer review organization, has found that Medicare HMOs had the highest percentage of confirmed quality problems of any setting reviewed during the year that ended March 31, 1990. Medicare HMOs experienced confirmed quality problems in 7.94 percent of the samples reviewed. Review of intervening care related to readmissions to hospitals from nursing homes or home health agencies, review of acute care hospitals, and review of ambulatory surgery were the three areas identified as the highest quality review problems.

LABORATORY USER FEES

The Health Care Financing Administration has proposed rules to charge most clinical laboratories $261 every two years for Medicare and Medicaid certification. These fees are expected to impact 312,000 hospital-based, independent, and physician office laboratories; these laboratories will be classified into ten categories based on the number of specialties and the volume of tests performed. In addition to the basic $261 fee, laboratories inspected by state surveyors would pay $840 to $2,870 and laboratories needing followup visits or complaint investigations will pay an additional $525 to $1,120. These fees were mandated by a 1988 federal law on laboratory inspections and are designed to cover costs incurred in performing certification-related activities.

FINANCIALLY DISTRESSED HOSPITALS

A study by Health Care Investment Analysts Inc. has found that one of every ten U.S. hospitals has serious financial problems caused by significant declines in utilization of cash flow. The study identified 538 distressed hospitals and estimated that half of these facilities will be closed within four years. Sixty-five percent of the distressed hospitals are located in urban areas with approximatley 50 percent having less than 100 beds and 38 percent having between 100 and 249 beds. A distressed hospital is defined as a facility experiencing substantial adverse changes in utilization, payor mix, profitability, capital structure, and/or liquidity.

STUDY OF THE UNINSURED

According to a study performed by the Employee Benefit Research Group, over 33 million nonelderly Americans who are not eligible for Medicare or Medicaid did not have private health insurance coverage in 1988. Uninsured rates vary widely by state, ranging from a low of 8.3 percent in Michigan to 28.1 percent in New Mexico. States with the highest uninsured rates included Alaska, Arizona, Arkansas, Florida, California, Louisiana, Mississippi, Nevada, New Mexico, Oklahoma, and Texas. Over half of the uninsured were employed. The 18.5 million uninsured workers represent 15 percent of the U.S. workforce.

RETAILERS AND RESTAURATEURS OPPOSE HEALTH INSURANCE TAX

Restaurant owners and retailers have formed a coalition, known as Help Establish Affordable Health Care Laws (HEAL), to oppose a proposed payroll tax to fund mandatory health insurance. The payroll tax proposal, which is supported by the AFL-CIO, would provide health insurance for the estimated one million New Jersey employees without health insurance. In a letter to Governor Jim Florio, the members of the Governor's Commission on Health Care Costs, and the Legislature, HEAL said that it was "seeking health care reforms that would provide affordable, accessible health care coverage to state residents without imposing mandatory health insurance or taxes that could have an adverse economic impact on New Jersey's business community as well as individuals." HEAL is comprised of the New Jersey Chamber of Commerce, the New Jersey Food Council, the New Jersey Restaurant Association, and the Health Insurance Association of New Jersey. The AFL-CIO supports the payroll tax because, under the current system, employers that provide health insurance coverage are forced to cover the cost of health care associated with employees that are not covered by health insurance.

OREGON HEALTH CARE RATIONING PLAN

One of the designers of Oregon's health care rationing plan is calling for the state to drop the plan. John Golenski, president of Bioethics Consultation Group, argued that the state's decision to exempt the elderly compromises the rationing plan and places the burden on poor women and children. According to Golenski, the state legislature exempted geriatric health care from the rationing plan due to concerns of a political backlash from the elderly.

MSNJ PUBLIC RELATIONS AWARD

The Medical Society of New Jersey public service television release, "The View of Earth From Space is Indescribably Beautiful," won a Meritorious Achievement citation at the prestigious Berny Awards.

FINI

"No man can sincerely try to help another without helping himself."

PROFESSIONAL LIABILITY

COURT CLARIFIES ROLE OF DEFENSE COUNSEL IN FILMING

An Illinois Appellate Court reversed an order requiring that defendants' counsel be present for the filming of the plaintiff's "day in the life" film. It also reversed an order holding the plaintiff's counsel in contempt and fining her for refusing to comply with the lower court's order. However, the court also made several rulings to protect the authenticity of such a film and to give defense attorneys access to recorded materials before a trial and use of certain materials during a trial. It also established rights that plaintiffs have to materials obtained by the defendants.

A "day in the life" film occasionally is used by plaintiff's counsel to chronicle every detail of the life of a plaintiff from morning to night, and can serve as a powerful tool in swaying jury sympathies and garnering larger awards.

The minor plaintiff filed a suit alleging that the defendants were negligent in providing medical service. The defendants obtained an order in the trial court allowing their presence during the filming of the "day in the life" film of the minor plaintiff.

The plaintiff's counsel refused to comply with the order, and the trial court held one of the plaintiff's counsel in contempt and imposed a $100 fine. "Day in the life" films were first approved by the Illinois courts in 1986; however, the issue of the presence of the defendants' counsel never had been addressed.

In addition to reversing the finding of contempt and the fine, the appellate court held that the film could be prepared without the presence of any of the defendants' representatives. However, the court also took steps to ensure that material potentially favoring the defense case be preserved and made accessible to the defense.

In this case, the plaintiff was required to preserve all of the film, whether included or not in the final version. The defendants then were entitled to view all of the film prior to trial, to take the discovery deposition of any witnesses who would authenticate the film, and to use any film taken by, but not used by, the plaintiff—assuming such film was deemed admissible.

Likewise, the court held that the defendants had to disclose the existence of any film the defendants intended to use to refute the plaintiff's disability. In such a situation, the plaintiff would be entitled to view all of the film, take discovery depositions of authenticating witnesses, and use film taken but not utilized by the defendants.

A further appeal was filed, and the case is now pending before the Illinois Supreme Court. (Reprinted from *Professional Liability Update,* American Medical Association, May/June 1990.)

NEW TRIAL ON ISSUE OF DAMAGES

A physician was entitled to a new trial on the issue of allocation of damages in an action awarding a patient and his wife $806,330.02 in damages for negligent treatment of an arm fracture, a New Jersey appellate court ruled. In a second trial on the issue of damages, a court awarded the patient $436,000 and his wife $120,000 which when added to prejudgment interest resulted in an $806,330.02 judgment. The jury found that the physician was negligent in performing an open reduction of a comminuted fracture of the distal humerus of the patient's left arm suffered in an automobile accident.

On appeal, the appellate court said that a second retrial was necessary. The total dollar amount of damages already was determined and did not need to be determined again. However, the physician should be given an opportunity to prove what portion of the patient's total damages for lost wages, medical expenses, general damages, and loss of consortium was not attributable to his malpractice and what part of the damages would be attributable to the probable consequence of a properly treated fracture of similar gravity. (Reprinted with permission from the *The Citation,* American Medical Association, Volume 61, July 1, 1990.)

FULL DISCLOSURE STATEMENTS WITH SET PATIENT BENEFITS FOR ADVERSE OUTCOMES

An innovative new program to defuse suits against surgical specialists arising from unanticipated adverse outcomes will be marketed soon in six states. "Eighty-five to 90 percent of suits against surgeons are brought because of failed patient expectations," says DeWayne L. Hull, MD, Fort Wayne, Indiana, plastic surgeon and program creator. "Our Physicians Risk Control program is designed to fully disclose some of the maloccurrences that may be associated with a given procedure. There are no surprises if there is some adverse outcome."

Disclosure programs are fairly common, but what makes the Physicians Risk Control (PRC) program different is that it pays a modest benefit, based on a set schedule for various procedures, to a patient who experiences an adverse outcome. For example, if pregnancy results, despite a laparoscopic tubal ligation procedure, the patient receives a monetary benefit of $2,500. A failed vasectomy results in payment of $1,000 to a patient. These payments are made even when no negligence was involved in performance of the procedure.

"We don't get into negligence issues," says Dr. Hull. "The program gives the patient an economic benefit if something untoward does take place. In the current world, a doctor would be fearful that any offer he might make to compensate in some way for an adverse outcome could be construed as an admission of negligence by a plaintiff attorney. However, in our program the disclosure statement, including a description of the specified benefit if something goes wrong, is mutually completed by doctor and patient before care is given."

Because PRC is a quasi-insurance product, it must be underwritten by a qualified insurer who will accept and hold participating physicians' premiums and pay out benefits as required. Dr. Hull has entered into a joint venture with Rollins Burdick Hunter, Chicago. Virginia Surety, a subsidiary of the Chicago-based Aon Corporation, will provide the underwriting. Dr. Hull, working with a number of advisors including former AMA President Dr. Ed Annis, is responsible for the development of the disclosure statements and the marketing of the program nationwide.

Here is how the program works: A surgical specialist would review the list of 66 disclosure statements in seven specialty areas available through PRC. For each procedure the physician selects procedures that he believes are high risk for triggering suits and then calculates a premium. He does this by estimating the number of times each year he performs that particular procedure. Using PRC's actuarially computed tables of the per procedure cost to insure a benefit in the event of an adverse outcome, that range from about $37 to $45 per procedure, he multiplies the number of times he does the procedure by the per procedure cost. If he does 60 procedures for which the per procedure fee is $40, then his annual premium is $2,400. He can pay it in one lump sum or he can pay 20 percent up front and finance the rest. He also can withdraw from the program along the way and his premium will be refunded.

In effect, the patient pays the procedural fee, that some might equate with "trip insurance," because it is added to the total bill. However, it often can be recouped from an insurer. "There is a specific CPT code that permits billing for explanations and disclosure," says Dr. Hull.

An enrolled surgical specialist receives disclosure brochures for the procedure(s) he has designated. Each brochure has been developed by surgeons in the given specialties including obstetrics/gynecology, and general, plastic, podiatric, orthopedic, urological, and cardiovascular surgery. Each brochure describes the given procedure, outlines alternatives to it, and lists possible maloccurrences. The patient signs a statement saying, "I have been advised of the risks and alternatives of (the procedure) and the associated anesthesia." Also, the patient signs, "I am aware that the practice of medicine is not 100 percent perfect in preventing maloccurrences and I understand my doctor cannot guarantee to me that I will not have a maloccurrence with this procedure."

The signed disclosure statement does not replace the informed consent process. Each doctor should continue to obtain informed consent in his own manner, using his own documents and methods.

What the signed disclosure statement does do is discourage any suits alleging failure to achieve informed consent in the event of a bad outcome. The fact that disclosure is documented with the patient's own signature and that a predetermined benefit is paid for a poor or unexpected outcome is a "powerful deterrent to litigation."

"Even if a suit does arise, the defendant doctor's position is considerably strengthened by his ability to produce the signed disclosure statement," says Dr. Hull.

However, the Physicians Risk Control program is no substitute for professional liability insurance, warns Dr. Hull, even though a physician need not carry it to participate in PRC. "What we do anticipate is that after a year or so of experience with the program, a doctor can approach his insurer and request a discount on his premium because of his participation with us," he suggests. "This is not a program for every doctor," says Dr. Hull. To participate in PRC, a physician must be board certified or board eligible or have limited the practice to a particular surgical specialty for at least three years.

The program will be marketed immediately in Illinois, Michigan, Ohio, Florida, New York, and Virginia, using printed materials and a 12-minute audiocassette. Dr. Hull says plans are to move as quickly as possible to obtain insurance department approvals in other areas. Surgical specialists for whom specific disclosure brochures already have been prepared will be targeted first, either individually or via some of the specialty societies that already have expressed interest in the PRC program. As time goes on, new brochures for other procedures will be developed. "This will be a physician-sensitive program," Dr. Hull says. (Reprinted with permission from the *Medical Liability Monitor,* Winnetka, IL 60093. July 24, 1990, Volume 15, Number 7.)

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Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to ½ tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.^{3}

How Supplied: Oral tablets of Yocon® 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:
1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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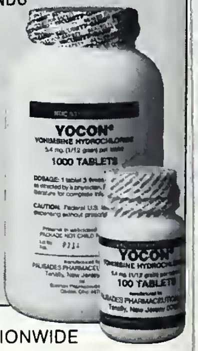

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EDITOR'S DESK

MEDICAL RESEARCH

Medical research is a relatively new development in the long history of medicine, with basic research attempting to understand underlying mechanisms of life and disease, and applied research using the basics in clinical settings or in the study of the delivery of care. The first large-scale medical research was carried out in German universities in the 1800s, establishing the firm commitment to simultaneous teaching and research that characterizes today's universities.

But nonuniversity research also flourished in the 19th century, supported by public and private funds. The initial showcase, the Pasteur Institute, was followed by similar foundations in Germany, Russia, England, and Japan. In the United States, the Woods Hole Marine Biological Laboratory and the Wistar Institute in Philadelphia were among the first of these independent research institutions.

The infusion of large amounts of private welfare into the field created the Rockefeller Institute for Medical Research in 1901 and the Carnegie Institution of Washington, DC, in 1902. Physicians also used their private resources as stimuli for the establishment of various foundations. Note the efforts of Dr. Edward L. Trudeau and Doctors Charles and William Mayo and the spate of other high-minded similar organizations that followed.

Governmental involvement, of marginal value initially, accelerated in the United States in the 1930s. The Hygienic Laboratory became the National Institutes of Health (NIH) in 1930. The National Cancer Institute was spawned in 1937. No longer do these agencies merely stimulate the monetary flow from private individuals. No longer do they merely award grants-in-aid and monitor their effects. They also do much independent research, in both basic and applied modes. So, in today's world we see all these forces competing—the universities, the independent foundations, and the government.

We are indebted to Dr. Lippman and his associates for this sampling of research performed in New Jersey. As is true of medical education, medical research is a prominent activity in the state, not dependent on or inferior to similar activities in neighboring states. Medical research in New Jersey has come of age.

But our delight in the progress noted in New Jersey research is not unalloyed. In today's world of increasing technology and sophistication come increasing caveats, relating to conflicts of interest and to accuracy of reporting.

Pharmaceutical and other manufacturers influence clinical research to the point of scandal. The favorable reporting of a new medication can mean millions in profit to the drug company. Failure of an investigator to disclose financial ties to the supplier, regardless of degree, is not only unethical but, at times, may be fraudulent. A requirement that all authors disclose their potential financial conflicts of interest is both reasonable and prudent.

We should be equally concerned about the scientific validity of the articles published. It should not be necessary for the editorial staff to review all of the raw data, as had been proposed by *JAMA*, and about which we previously commented, but the erudite reader should understand that a high percentage of scientific articles do not meet reasonable criteria for validity. Even the authors of many of these flawed studies fail to realize their errors; these are "honest" mistakes. We cannot read only abstracts or conclusions, data need to be examined in full. Some basic knowledge of statistics can be helpful to the reader and should be mandatory for the authors. And it could help the media to achieve some semblance of truth.

It will not be easy to improve the validity of published research. Much statistical analysis will be needed. It should be easier to insure that financed researchers have clean skirts, unsoiled by the blandishments of industry. The expected nomination of Dr. Bernadine Healy of the Cleveland Clinic to head NIH may help, although it may prove interesting to see how she handles grants earmarked for that Ohio institution, the target of many previous NIH grants and the employer of her physician-husband. ☐

> "The great tragedy of Science—the slaying of a beautiful hypothesis by an ugly fact."
>
> Thomas Henry Huxley,
> *Biogenesis and Abiogenesis* (1870)

BOOK REVIEWS

CLINICAL UROGRAPHY: AN ATLAS AND TEXTBOOK OF UROLOGICAL IMAGING

Howard M. Pollack, MD (ed). Philadelphia, PA, W.B. Saunders, 1990. This extensive, easy-to-read, three-volume text covers the discipline of genitourinary radiology. The book is divided into sections: a general discussion of the field; various imaging procedures (from plain films to MRI and lymphography); specific disease entities such as congenital disorders, neoplasms, and vascular diseases; indepth analysis of the diseases of the adrenal gland; abnormalities of the retroperitoneum and other miscellaneous disorders; and reviews of renal transplantation and interventional radiology.

The authors are acknowledged leaders in the field, and display a writing ability to match. The images are first rate. This book is one of the most exhaustive treatments of the subject with up-to-date approaches to the diagnosis of genitourinary system diseases. ☐ Neil B. Horner, MD

CURRENT OPERATIVE UROLOGY. 1990

E. Douglas Whitehead, MD (ed). Philadelphia, PA, J.B. Lippincott Company, 1990. This volume is an apt successor to the unique texts previously published in this series. It follows the format of an annual edition, published after a previously successful encyclopedic text.

In the first two editions of *Current Operative Urology,* the expert in each area selected a seminal article to serve as the basis of the evolving understanding of a particular operative approach. An annotated bibliography was provided. The expert, in his commentary, analyzed the operative approach from the standpoint of historical perspective, allowing the student to gain insight into the problems inherent in the operation, and how solutions were formulated. The emphasis on understanding the evolution in thinking is unique in surgical texts, and provides a better understanding of what has come to be the current "state of the art."

Because his commentary is less formalistic when compared to standard texts, the expert also was able to personalize the discussion, providing a better understanding of the actual operative approach. Following the commentary is an overview, in which another expert discusses the same problem. This approach, a roundtable discussion instead of a pedantic summary, is an effective teaching method.

In this current volume, Whitehead has maintained the successful format of the previous volumes, but has narrowed the focus because the current explosion of knowledge in medicine demands more rapid digestion and dissemination. Whitehead believes that a voluminous tome is too long in production, and frequently too expensive. Where a shotgun previously was effective, a rifle now is needed.

The text covers ten sections: renal transplantation, surgery for incontinence, continent diversion, augmentation enterocystoplasty, carcinoma of the testis, surgery for male infertility, reflux, posterior urethral valves, postnatal obstructive emergencies, and laser surgery.

Whitehead has been eminently successful in having these selected areas expertly and comprehensively developed. This text should stand the test of time, and is strongly recommended for inclusion in the library of every urological surgeon. ☐ John H. Lifland, MD

DIAGNOSTIC LARYNGOLOGY

Bruce Benjamin. W.B. Saunders Company, Philadelphia, PA, 1990. This book fulfills its name by giving a state-of-the-art review of the procedures for diagnosing laryngeal pathology. The text is very clear in its descriptions of the modalities available for performing laryngeal diagnostic procedures. The strongest point in this book is the second part that has photographs of the various laryngeal pathologies. Careful study of these pictures will give the reader a very complete picture of the diseases present in the larynx. However, the main drawback of the procedures mentioned in this book is that the greater majority of the otolaryngologists would not be in a position to have the necessary equipment to perform the procedures as described. There are very few places in the world that have all the equipment to do state-of-the-art examinations. Therefore, it can be somewhat frustrating for the average otolaryngologist to read this book and realize it is not in the realm of his capability to perform the mentioned procedures. Yet, it is without reserve that I recommend this book to otolaryngologists and to anyone else interested in laryngeal pathology, as the text gives a complete picture of state-of-the-art diagnostic procedures. ☐ Harold Arlen, MD

FUNDAMENTALS OF GYNECOLOGY AND OBSTETRICS

Dale R. Dunnihoo, MD. J.B. Lippincott Company, Philadelphia, PA, 1990. Doctor Dunnihoo of the Louisiana State Medical School has performed a tremendous feat by putting together an enormous amount of material covering every aspect of the office and hospital practice of obstetrics and gynecology. *Fundamentals* serves as a textbook for medical students as well as a practical guide for family physicians and internists. So exhaustive and thorough is the information that physicians preparing for certification or recertification might select this book to advantage. The material is well organized and clearly presented with a somewhat unusual system of three typographical variations so that the reader can easily differentiate more important facts from the less important. There is only one problem with this book—minimal discussion of potentially controversial aspects of new information unsupported by references. Most clinicians read recently published textbooks, expecting that the authors have sifted through the mountains of publications arriving almost daily, have separated fact from fiction, and have presented authenticated valuable new information. All too frequently most clinicians have learned that sometimes new information has been proved false and that new procedures and treatments subsequently have been proved ineffective or even harmful. Although references can be selected to substantiate almost anything, references do serve to indicate that recent publications by recognized and respected authorities have been read. This book is recommended with reservation. ☐ Jerome Abrams, MD, MPH

POCKET ATLAS OF HEAD AND NECK MRI ANATOMY

Robert B. Lufkin, MD, and William N. Hanafee, MD. New York, NY, Raven Press, 1989. This core text provides a handy guide to the normal anatomy of the base of the skull and neck. The book is arranged in four parts: neck, oropharynx, nasopharynx, and skull base. Each section then is subdivided into axial, sagital, and coronal planes. Unfortunately, only T-1 weighted images are included. T-2 and contrast-enhanced MRI images are not addressed. The overall quality of the images rates fairly well with the various anatomical areas clearly labeled. The book delivers what its title promises: a pocket atlas that best serves the radiologist or clinician requiring a quick reference. ☐ Neil B. Horner, MD

Medical Research in New Jersey

ALAN J. LIPPMAN, MD

New Jersey has a long and distinguished history of providing quality, up-to-date medical care for its residents. Nevertheless, for certain high technology innovative treatments, New Jersey patients consider medical care at centers in New York or Philadelphia. Many New Jersey physicians remain unaware or unconvinced, however, that new technologies undergoing development in our state may have immediate clinical relevance and application, and may spare New Jersey residents the need to seek treatments elsewhere for modern treatments heretofore unavailable closer to home.

Often, as practicing physicians in New Jersey, we may not be sufficiently aware of the existence of such ongoing research nor the importance and immediate relevance to our patients of some of the newer treatment modalities being introduced in our state. In addition, patients, through the media, are becoming more educated consumers of health care. They, in turn, wish to learn as soon as possible about the latest and most innovative treatments. Physicians, hence, need to be informed.

In this special issue, *NEW JERSEY MEDICINE* focuses attention on some of these matters by considering certain basic research areas and the ways in which these research efforts bear upon the current clinical practice of medicine.

The topics included in this issue are wide ranging, covering a number of specialty areas; however, there remain many more areas deserving of consideration. Omission of certain subjects and of many other reputable and productive investigators from this particular issue should not be construed as discriminatory nor imply "exclusivity."

Ideas and articles for this issue were solicited from physicians representing both the clinical and academic arenas throughout the state. More than 125 letters of inquiry were sent to medical leaders representing the entire spectrum of New Jersey health care facilities including directors of research at each of the medical schools, directors of research or chairmen of institutional review boards at all major New Jersey hospitals, presidents of the Medical Society of New Jersey, the Academy of Medicine of New Jersey, and the various subspecialty societies within the Academy, representatives of the various state health care agencies, and medical directors of all major pharmaceutical organizations in New Jersey.

As a result of the initial survey, about 25 areas of interest were identified; the 11 topics in this issue represent a distillate of many that were suggested.

All interested investigators are invited to consider *NEW JERSEY MEDICINE* as a vehicle for publishing relevant clinical reports and disseminating results of clinical research that may have immediate bearing on patient management. This will have the effect of placing New Jersey in the forefront of "state of the art" medical practice. ■

Dr. Lippman is guest editor of this special issue.

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Innovative Methods of Cardiac Defibrillation

LAWRENCE J. GESSMAN, MD

Sudden death caused by fatal cardiac arrhythmias represents a major health care problem in New Jersey. The use of a remote transtelephonic defibrillator, a technique undergoing development, is an interesting new approach to provide prompt restoration of cardiac rhythm and function.

The American Heart Association estimates that there are approximately 400,000 sudden deaths per year in the United States presumably due to ventricular tachycardia (VT) and fibrillation (VF). Sudden death is the number one public health problem in the United States. Fortunately, we have the "cure" for sudden arrhythmic death: early defibrillation. Unfortunately, a defibrillator rarely is present in time at the place of occurrence of VT-VF, usually in the patient's home or other location outside of the hospital.

Dr. Gessman is director of electrophysiology, Deborah Heart and Lung Center. Address requests to Dr. Gessman, Deborah Heart and Lung Center, Browns Mills, NJ 08015-1799.

Despite advances in mobile rescue, fewer than 5 percent of all sudden death victims are successfully resuscitated.[1] Fewer persons still are appropriately referred for electrophysiologic workup to prevent the high recurrence rate of VT and VF, which has been reported to be 30 percent in the first year after initial successful resuscitation.[2]

This article will review advances in defibrillation that should reduce the out-of-hospital mortality from VT and VF. The article focuses on approaches to outpatient defibrillation using telephone controlled and automatic external defibrillators (AEDs); improvements in automatic implanted defibrillators; and a discussion of the electrophysiologic workup and risk stratification for patients at risk of sudden death, including how to choose patients for antiarrhythmic drug therapy, internal automatic defibrillator therapy, and external telephone controlled defibrillation or AED therapy.

EXPERIENCE WITH MOBILE RESCUE

Pantridge, in 1966, was first to use a mobile rescue ambulance system to provide early defibrillation. Since then, hundreds of thousands of VT-VF victims have been successfully resuscitated by mobile rescue paramedics. In a few, well-funded and well-publicized systems, as many as 25 to 30 percent of all sudden death victims are successfully resuscitated.[3] However, nationwide less than 5 percent of all arrest victims are resuscitated.

New Jersey statistics are closer to the national average, and not improving. The last five-year experience from the Overlook Hospital Mobile Intensive Care Unit (MICU) (Table) shows the average resuscitation rate to be 6.2 percent, but the MICU's failure to improve out-of-hospital sudden death survival odds over the last few years. Survival is directly related to the time from patient collapse to time of defibrillation. For example, patients with implanted defibrillators experiencing sudden VT and VF usually are defibrillated within 15 seconds with almost 100 percent survival without need for cardiopulmonary resuscitation. For VF patients resuscitated by mobile rescue, if CPR is started immediately by a witness at time of collapse, and defibrillation accomplished within one to three minutes from collapse, then survival can be as high as 30 to 45 percent.[3] Even if CPR is started immediately, however, survival statistics fall dramatically to less than 15 percent if defibrillation is not accomplished within ten minutes of patient collapse.

Recent advances in defibrillation technology have the potential to reduce response time, and, therefore, increase survival dramatically. Two new innovative approaches to out-of-hospital external defibrillation will be described.

TRANSTELEPHONIC DEFIBRILLATION

Drs. Gessman, White, and Raman, from Deborah Heart and Lung Center, Browns Mills, invented and tested a telephonic defibrillation system to enable outpatient defibrillation to be administered by minimally trained lay witnesses, including spouses of high-risk patients, and volunteer ambulance workers not currently certified to defibrillate.[4]

The telephone defibrillation (Medphone Corporation, Paramus, New Jersey) consists of a portable attaché case containing a standard 360 joule defibrillator, a speakerphone, telephone electrogram (ECG) telemetry circuits, self-adhesive ECG-monitor defibrillation electrodes, and telephone control circuits that allow a remotely located physician to operate the defibrillator by tone-code control (Figure 1). The telephone defibrillator patient unit automatically dials a base station when opened (Figure 2). The base station is staffed by a coronary care unit nurse or physician, who observes the telemetered ECG, and assesses electrode contact by electrode impedance telemetry (high impedance means poor or no electrode contact), obtains history of unconsciousness from the witness via the speakerphone, and charges the defibrillator to any one of

Table. ***Overlook Hospital Mobile ICU rescue data.****

Year	Total Patients Resuscitated in Field	Total Initial Saves (Patients Admitted Alive to Hospital) No.	Percent	Long-Term Survivors No.	Percent
1985	177	20	11	6	3.4
1986	153	31	20	12	7.8
1987	165	36	22	13	7.9
1988	156	34	22	12	7.7
1989	123	18	15	5	4.1
Total	774	139	18	48	6.2

*Data from Dr. John Gregory

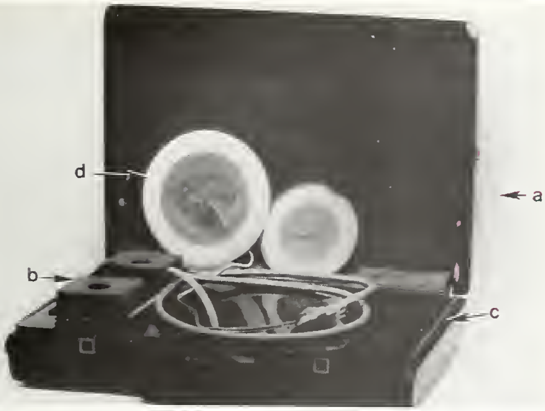

Figure 1. Prototype of the MD-phone™ telephone defibrillator: a. standard 4 pin telephone jack connected to a 100 foot spool of telephone wire stored in the upper lid connects the device to the telephone system; b. optional acoustic coupler to allow a telephone handset connection to the telephone system; c. hinge switch automatically turns device on, and automatically dials the base station when the case is opened; and d. R-2 ECG monitor-defibrillator electrodes. The outer white circumference of the electrodes are adhesive, allowing them to stick to the V1-V5 position on the patient's chest.

several energy levels between 10 and 360 joules, and discharges the defibrillator, if necessary via tone code command. As a safety feature, the defibrillator cannot be charged or discharged locally by the patient or lay witnesses.

The base station control panel of the telephone defibrillator is similar to the controls of a standard defibrillator, and uses the 1-select energy, 2-charge, 3-discharge system (Figure 3). Discharges either can be synchronous or asynchronous. The control panel also has controls to adjust the gain of the telemetered ECG, select impedance or respiration (measured as the variation in transthoracic impedance caused by breathing), and audio volume controls for the speakerphone section.

The telephone defibrillator (TD) was tested in 17 patients at the electrophysiology laboratory, Deborah Heart and Lung Center.[5] VT or VF was induced by programmed stimulation during serial drug testing. R-2 adhesive ECG-defibrillator monitor electrodes were attached to the patient, enabling the patient's ECG to be telemetered by the TD patient unit to the base station, located in another building on the Deborah campus. The remotely located monitoring physician made the diagnosis of VT or VF from the telemetered ECG, questioned the witnesses in the laboratory to determine patient level of consciousness and whether the witnesses were standing clear, and charged and discharged the defibrillator to either synchronously or asynchronously cardiovert VT or defibrillate VF by telephone remote control. The TD system recently was FDA-approved in the United States for home use by lay rescuers.

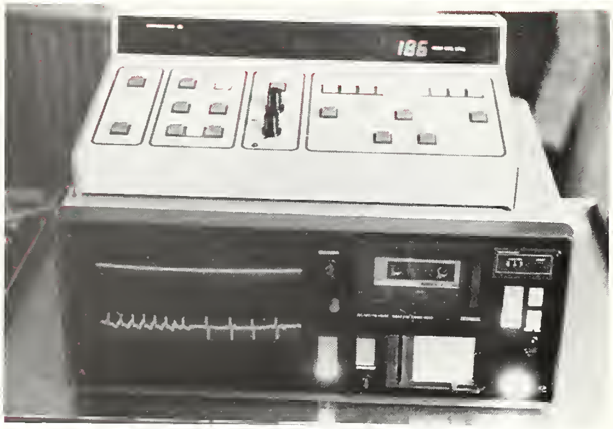

Figure 2. Telephone defibrillator base station showing the control panel, and ECG display, chart recorder, and tape recorder sub-units.

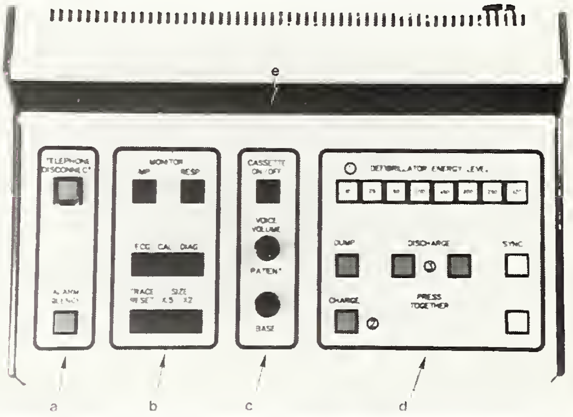

Figure 3. Base station control panel of telephone defibrillator system: a. in case of inadvertent telephone disconnect, pressing the upper button will cause the unit to automatically re-dial and re-connect the patient unit to the base station; b. controls that select impedence versus respiration telemetry, and set the gain of the telemetered ECG; c. audio speaker phone volume controls d. defibrillator control section using the select energy, charge, discharge system. Charge dump and synchronous charge delivery also are selectable.

An example of telephone defibrillation is shown in Figure 4. VT was induced by burst pacing and degenerates to VF. The remote monitoring physician diagnoses VF in 3.5 seconds, and then asks the witness if the patient is conscious. Note that speech temporarily interferes with the ECG transmission. Upon receiving a negative answer from the witness, the physician checks electrode impedance that measures 67 ohms indicating good electrode contact (35 to 120 ohms is normal impedance for properly applied electrodes), charges the defibrillator to 50 joules, and discharges the defibrillator converting VF to normal sinus rhythm in a total time of 36 seconds. The touchtone control signals also interfere briefly with ECG telemetry.

A total of 16 episodes of VT or VF and 4 episodes of atrial fibrillation in 17 patients were successfully

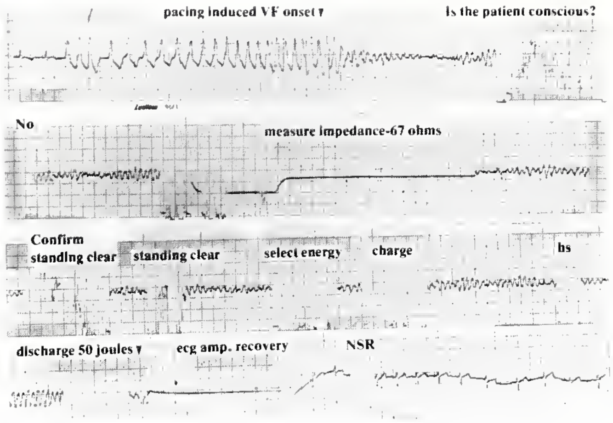

Figure 4. Example of telephone controlled defibrillation.

defibrillated or cardioverted by the remotely monitoring physician using the TD system in a total mean time from arrhythmia onset to shock termination of 47 ± 12.4 seconds. The mean ± SD time required for the patient unit to dial the base station was 13.0 ± 1.1 seconds. The time required for the physician to diagnose VT or VF from the telemetered ECG was 3.3 ± 1.5 seconds. The mean time required for the physician to question the witness and to determine state of consciousness of the patient was 11.1 ± 5.3 seconds, and the mean time required to determine the witness was standing clear was 7.0 ± 1.4 seconds. The time required to charge and to discharge the defibrillator was 12.6 ± 4.0 seconds.

The landline telephone defibrillator also has been tested in Belfast, Ireland.[6] Drs. Dalzell and Adgey currently are testing a cellular telephone version of the TD.[7]

AUTOMATIC EXTERNAL DEFIBRILLATOR (AED)

Another approach to out-of-hospital external defibrillation is to incorporate an automatic computerized VT-VF arrhythmia detector within an external defibrillator. These "smart" defibrillators, also called automatic external defibrillators (AEDs), require almost no user expertise. Cardiac arrest is determined by the witness by observing absence of respiration and pulse. The witness then applies the self-adhesive ECG monitor defibrillation pads over the patient's chest and the device is activated by merely turning it on. The AED analyzes the ECG and reliably discriminates fast VT and VF from all other non VT-VF rhythms. If fast VT or VF is present, the AED will automatically charge and, depending on model, either will automatically deliver the shock (fully automatic AED), or advise the user to press a button that will deliver the shock (semiautomatic AED).

The VT-VF algorithms within AEDs have proved reliable in large-scale mobile rescue trials.[8] They typically have a 90 percent sensitivity for correctly identifying ventricular fibrillation, and a 95 percent specificity for not shocking nonventricular fibrillation rhythms.[9] Volunteer and basic level ambulance technicians can be trained in the use of AEDs and perform equally well to trained paramedics using standard defibrillators.[10] Lay witnesses also can learn to use AEDs with good skill retention.[11-13]

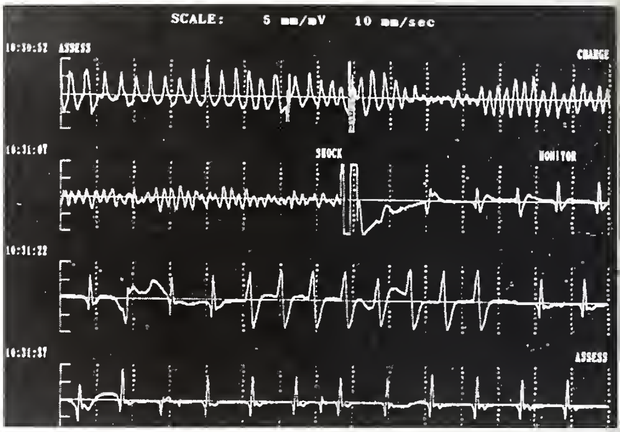

Figure 5. Example of Heart-Aid 1000 AED outpatient VT-VF resuscitation. The AED contains a tape recorder and clock that records the VF—shock—postshock ECG sequence for later analyses.

We have used AEDs in five VT-VF patients recovering from amiodarone lung toxicity over a one-to-two month period at home while awaiting sufficient pulmonary recovery to enable lower-risk thoracotomy for placement of an implanted defibrillator. One of the five patients experienced VT-VF at home and was successfully resuscitated by his wife using an AED (Figure 5). He was admitted to Deborah Heart and Lung Center and underwent elective placement of an implanted defibrillator.

AICD DEVICES

The current, second generation (Cardiac Pacemaker Inc.) Ventak 1550 Automatic Implanted Cardioverter Defibrillator (AICD) is an improvement over the initial first generation CPI 1510 and 1520 devices, and the original Intek Aid and AID-BR devices. The Ventak 1550 pulse generator usually is implanted under the skin of the left upper quadrant of the abdomen because of its relatively large size; it has an estimated battery longevity of five years. The pulse generator usually is connected to two screw-in type epicardial pacing leads to provide bipolar rate sensing, and two patch electrodes implanted over the left and right ventricle to deliver the defibrillation energy (Figure 6). The device senses VT-VF by counting heart rate from the rate sensing leads. The criteria for detecting VT-VF is satisfied when the rate sensing lead counts a heart rate greater than a programmable "rate cut off" that usually is set at 10 to 30 beats per minute slower than the VT rate. In addition, a QRS morphology detector circuit determines the probability density function (PDF) from the electrogram that it inputs from the patch electrodes. This feature either can be programmed on or off. If on, both rate and PDF must be satisfied to deliver a shock. The device will deliver a first shock of 25 or 31 joules, which is programmable. If the first shock is unsuccessful at converting the arrhythmia, a second through fifth shocks of 31 joules each will be delivered to terminate the arrhythmia. The device currently delivers a unidirectional, truncated exponential shock from the LV apex patch (cathode) to the RV patch (anode) as is shown in the upper left of Figure 6. The shock is delivered in 8 to 15 seconds after sensing VT-VF, and the device is "committed" to shock once rate and, if programmed on, PDF is satisfied. The device will deliver a shock once VT-VF criteria are met, even if the VT stops spontaneously prior to the 6 to 8 seconds required for charging and then discharging its capacitors into the patient.

There are several manufacturers developing future AICD systems, and a number of these systems already are in clinical trials. Improvements in future AICDs and in the implantation techniques are summarized briefly in Figure 6, showing the current and possible future nonthoracotomy AICD implantation techniques,[14] defibrillation pulse delivery schemes, VT-VF sensing algorithms, and incorporation of backup VVI and antitachy pacing and other features in future devices. Figure 6 also shows the shape of the truncated exponential 25 to 31 joule waveform used in presently available AICDs. New defibrillators may use sequential, or biphasic shocks that appear to be more effective than monophasic, unidirectional shocks in converting VT-VF at lower energy.

ELECTROPHYSIOLOGY TEST METHOD

Survivors of out-of-hospital VT-VF unrelated to a specific, readily correctable cause, should undergo invasive electrophysiologic (EPS) testing. Numerous studies have shown that the EPS-directed therapy is far more efficacious than empiric or Holter monitor-guided drug therapy. The technique of EPS testing is to place an electrode catheter in the right ventricle and to apply one to three extra stimuli in an attempt to induce VT or VF. If VT or VF can be induced, the patient is retested after intravenous or oral administration of antiarrhythmic drugs. If VT or VF no longer is inducible after drug delivery, the drug is shown to be efficacious. If VT or VF is still inducible, the first drug is abandoned and, serial drug testing with several other antiarrhythmic drugs is tried. If a standard antiarrhythmic drug, e.g. quinidine, Pronestyl™, mexiletine, cannot be found that suppresses inducible VT or VF, the patient then is triaged to receive an automatic implanted defibrillator, antitachycardia pacer plus a defibrillator, amiodarone drug therapy, or mapping guided left ventricular aneurysmectomy or VT focus ablation (Figure 7).

Of 100 consecutive VT-VF patients referred to Deborah from January 1988 to March 1989, 48 patients ultimately were controlled and treated by standard antiarrhythmic drugs, 22 patients by amiodarone therapy, 25 patients by AICD-antitachycardia pacemaker therapy, and 6 patients by mapping guided left ventricular aneurysmectomy. The EPS

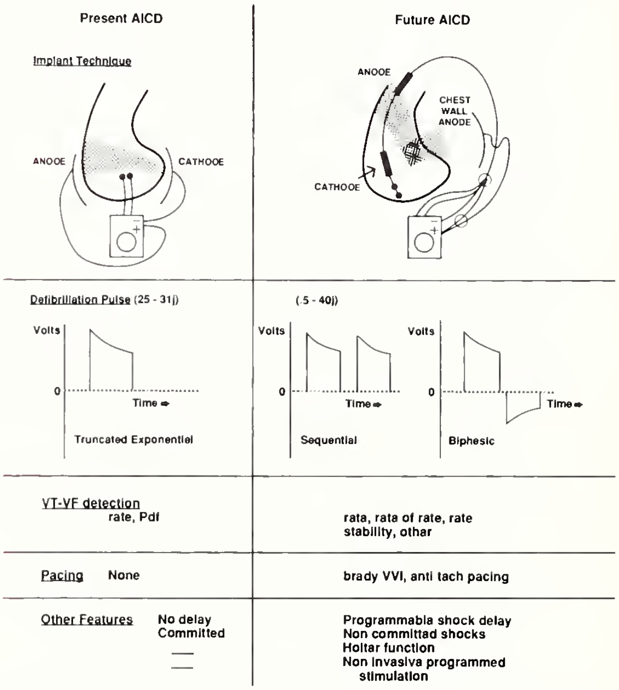

Figure 6. Comparison of present and future automatic implantable defibrillator system implant techniques, lead systems, VT-VF detection algorithms, shock wave forms, and other features. A nonthoracotomy lead system delivering a bidirectional shock from a cathode on a "pacemaker-like" lead to two anodes (one on the lead and one on a submuscular chest wall patch) is shown in the upper right.

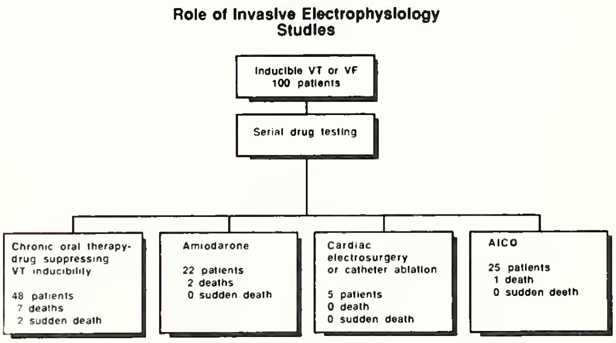

Figure 7. Results of treatment of 100 consecutive VT-VF patients at Deborah Heart and Lung Center using the electrophysiology test method. Data for each subgroup are presented as total number of patients treated, and total deaths and sudden deaths at one year mean followup for each subgroup.

test method, EPS triage, and results of therapy for these patients in a one-year followup are shown in Figure 7. Our results are similar to other results reported in the medical literature.

Our results suggest that amiodarone and AICD therapy, and surgical ablation are more effective therapy than standard antiarrhythmic drug therapy. Because amiodarone is associated with a high incidence of organ toxicity, we usually only use amiodarone rather than implant the defibrillator in older patients who are poor candidates for thoracotomy. Because very few patients have operable left ventricular aneurysms, and because surgical risk of mapping guided aneurysmectomy is in the 10 to 15 percent range compared to 2 to 5 percent for AICD surgery, far more patients are candidates for AICD than corrective surgery.

Technical improvements such as smaller size, longer battery life, addition of antitachycardia and brady pacing, development of all transvenous lead systems, and easier, more cost-effective patient device followup by transtelephonic telemetry may expand the role of AICD therapy, and further diminish the role of standard antiarrhythmic drug therapy and amiodarone therapy in the future.

RISK STRATIFICATION

To date, the EPS test method has been clinically applied to patients who are survivors of sustained monoform VT and VF. These patients represent 5 percent of the total number of sudden death victims in the United States per year.

AICD therapy intuitively seems to be the best strategy for high-risk patients. However, the risk-benefit ratio and the cost-benefit ratio of such an approach may be too high. For example, approximately 25 percent of the 400,000 survivors of acute myocardial infarction per year in the United States have low ejection fractions and frequent PVCs, and, thus, are considered at high risk for sudden death. To date, the AICD has been implanted in approximately 10,000 patients worldwide, and already is putting extreme stress on the medical reimbursement and medical finance system. The cost of AICD therapy is approximately $35,000 to $50,000 per patient with $17,000 for the generator and leads alone. This cost, and small morbidity and mortality associated with AICD implants, would be dramatically amplified if applied to large populations, such as the high-risk postmyocardial infarction survivors.

An alternative approach is to treat high risk for sudden death patients by training patient family members to use a home defibrillator. These devices cost approximately $5,000 per patient. Unlike antiarrhythmic drugs and AICD devices, automatic external defibrillators and telephone defibrillators are noninvasive, and have no physicial proarrhythmic or other side effects. Our preliminary data show that AEDs can be operated by lay witnesses, and can save lives. After a high-risk patient has his first clinical episode of sustained VT-VF, and is saved by use of a home defibrillator, the patient then could be treated by the electrophysiology test method to guide future antiarrhythmic drug, surgical, ablation, or AICD therapy.

Widespread application of AEDs in nursing homes, industry, transportation centers, public arenas, trains, airplanes, volunteer ambulances, and police and fire vehicles, and in the homes of high-risk patients may allow for earlier defibrillation, and an increase in the 5 percent save rate for out-of-hospital sudden death. ■

REFERENCES

1. Stults KR, Kerber RE: Recent advances in out-of-hospital defibrillation. *Choices Cardiol* 3:280, 1989.

2. Baum RS, et al.: Survival after resuscitation from out-of-hospital ventricular fibrillation. *Circulation* 50:1231, 1974.

3. Eisenberg MS, et al.: Treatment of out-of-hospital cardiac arrest with rapid defibrillation by emergency medical technicians. *N Engl J Med* 302:1379, 1980.

4. Gessman LJ: Remote, telephone cardiac resuscitation device. US Patent #4,102,332, July 25, 1978.

5. Gessman LJ, Raman S, White MC, et al.: Initial patient experience with telephone remotely controlled cardioversion and defibrillation. *J Am Coll Cardiol* 11:66A, 1988.

6. Dalzell G, Adgey AJ, et al.: Assessment of a device for trans-telephone control of defibrillation. *Lancet* 1:695-697, 1988.

7. Dalzell G, Adgey AJ, et al.: Correction of cardiac arrest outside hospital by remote defibrillation using a cellular telephone. *Pace* 13:533, 1990.

8. Weaver D, et al.: Use of the automatic external defibrilator. *N Engl J Med* 319:660, 1988.

9. Cummens RO, et al.: A new rhythm library for testing automatic external defibrillators: Performance of three devices. *J Am Coll Cardiol* 11:597-602, 1988.

10. Stults KR, et al.: Efficacy of an automatic external defibrillator in the management of out-of-hospital cardiac arrest: Validation of the diagnostic algorithm and initial clinical experience in a rural environment. *Circulation* 73:701-709, 1986.

11. Moore JE, et al.: Layperson use of automatic external defibrillation *Ann Emerg Med* 16:669, 1987.

12. Swenson RD, Weaver WD, et al.: Automatic external defibrillators used by family members to treat cardiac arrest. *Circulation* 76:463, 1987.

13. Chadda K, Kammer R, et al.: Improved outcome with the use of AED in the community setting. *Pace* 2:884, 1988.

14. Saksena S, et al.: Implanation of a cardioverter/defibrillator without thoracotomy using a triple electrode system. *JAMA* 259:69, 1988.

Laser Energy for Tachycardia Ablation

SANJEEV SAKSENA, MD

A step beyond pharmacologic therapy and conventional surgical ablation of tachyarrhythmia foci, laser energy application presents an important new development in the restoration of a stable cardiac rhythm.

While the greatest body of effort in antiarrhythmic therapy has been devoted to pharmacologic measures, the concept of nonpharmacologic therapy has existed for some time. In the 1940s and 1950s, this led to the development of artificial cardiac pacing for bradyarrhythmias and electric shock therapy for reversion of atrial and ventricular fibrillation. Effective treatment of bradycardias by implantable cardiac pacemakers on a chronic basis occupied attention in the 1960s and the 1970s. In the last two decades, recognition of tachyarrhythmias as a major source of mortality and morbidity in cardiovascular disease has been increasing. This heightened awareness has accounted for the recent realization that a primary cause of mortality in North America and Western Europe, sudden cardiac death, most frequently is due to ventricular tachyarrhythmias.[1] It is estimated that the sudden cardiac death syndrome affects 300,000 to 400,000 individuals in the United States annually. It has been estimated that another 100,000 individuals are diagnosed annually with sustained ventricular tachycardia, that may not necessarily result in immediate mortality, but has a lethal potential. Furthermore, supraventricular tachyarrhythmias are a frequent cause of morbidity resulting in hospital admissions as well as emergency room visits. An estimated 800,000 individuals may be treated annually for this disorder in the United States. A subgroup of the latter, in whom the arrhythmia is associated with ventricular pre-excitation, e.g. Wolff-Parkinson-White syndrome, even has the potential for a lethal outcome.

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Current clinical experience with pharmacologic therapy of tachycardias has been characterized by limited efficacy and a lack of a clear rationale either

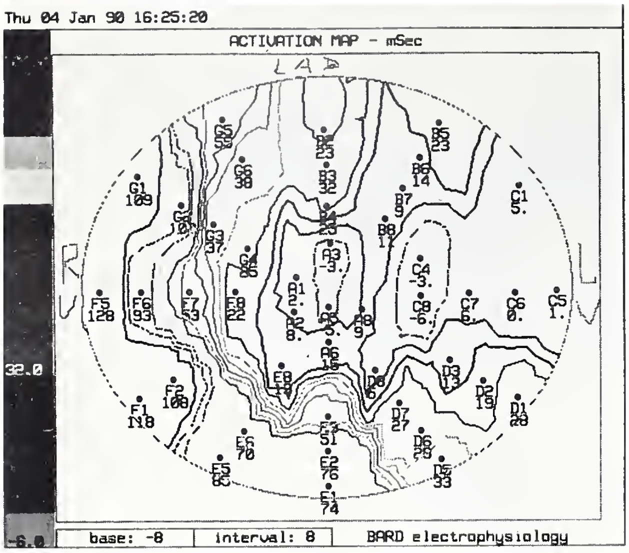

Figure 1. Computerized intraoperative epicardial activation map in a patient with sustained ventricular tachycardia (VT) and coronary artery disease. Fifty-six epicardial electrograms are simultaneously recorded in a single VT beat. The cardiac apex is in the center with the remainder of the ventricle displayed laterally. Note that the earliest activation is at the cardiac apex (location A) and in the anterolateral region. Abbreviations: LAD = left anterior descending coronary artery; RV = lateral right ventricle; LV = lateral left ventricle. (Reproduced with permission, *J Interventional Cardiol*, 1990.)

for drug selection or in the methodology used to achieve it. Thus, this culminates in multiple antiarrhythmic drug trials and repeated hospital admissions in individual patients. With the success of implantable cardiac pacemakers in the chronic treatment of bradyarrhythmias, nonpharmacologic options for the treatment of tachyarrhythmias have been actively evaluated. Therapeutic approaches have included ablation, i.e. the arrhythmogenic substrate is eliminated, or tachycardia reversion using an implantable device. Ablation of the arrhythmogenic substrate has become an increasing attractive therapeutic option for many drug-refractory patients. It can provide a long-term cure and eliminates the need for further antiarrhythmic therapy. In the last decade, a number of new ablative procedures have been evaluated for the therapy of symptomatic supraventricular and ventricular tachyarrhythmias. The development of cardiac mapping that permits accurate identification of the tissues resulting in tachycardia genesis dramatically has enhanced the efficacy of surgical ablation procedures.[2,3] Computerized mapping systems now are being clinically employed during the surgical procedure (Figure 1). These systems make cardiac mapping rapid, provide reproducible information, and increase the potential application of tachycardia ablation techniques. However, despite improvements in our localization of the culprit tissues in the heart, current ablative procedures have many limitations. A large number of tachycardia sites of origin either are not easily accessible during surgery or cannot be fully resected. The mechanical resection process is difficult to apply at sites such as the intraventricular septum, papillary muscles of the left ventricle, or in the posterior left ventricle near the valvular apparatus.[4,5] As a result, a number of adjunctive techniques are being considered to enhance the efficacy of surgical excision. One common technique currently employed is cryoablation.[6] This procedure is tedious and significantly prolongs cardiopulmonary bypass time. This may have adverse perioperative consequences.[7] The efficacy of the method, particularly in diseased human tissues, is difficult to evaluate during surgery and the method can be most effectively used in a cold cardiopleged heart. This eliminates the possibility of analyzing the efficacy of ablation directly on the tachycardia. Thus, it may be impossible to assess the efficacy of the ablative procedure at the end of the operation. There also is significant concern about the myocardial effects of cryoablation that may result in significant left ventricular dysfunction.[8] At the present time, there is a continuing search for new techniques that are more precise, rapid, and less damaging to the myocardium to simultaneously enhance efficacy and reduce perioperative risk.

For the past six years, we have been evaluating the use of catheter-delivered laser energy for the ablation of supraventricular and ventricular tachycardia.[9,10] Use of laser energy for cardiovascular application is increasing and laser angioplasty systems are being applied clinically after extensive experimental evaluation. These angioplasty catheter systems are being tested in peripheral and coronary circulations.[11] A variety of laser energy sources including argon, Nd:YAG, or different excimer lasers have been evaluated. It is expected that laser angioplasty systems will enhance the applicability of angioplasty procedures to more challenging disease situations such as totally occluded arteries, arteries unresponsive to balloon angioplasty, or reopening of acutely thrombosed vessels. Presently, most approaches utilize laser angioplasty in conjunction with balloon angioplasty. Myocardial laser ablation for arrhythmia suppression has been evaluated experimentally for over five years. As a result of these experimental studies, the feasibility of ablation in atrial myocardium, normal human ventricular myocardium, the specialized conduction system, at the atrioventricular groove, and the diseased human ventricular myocardium has been demonstrated.[12-14]

Laser light is a stimulated emission of electromagnetic radiation and has several important properties: it is coherent with the light waves being in the same phase; it can be readily directed and collimated; it is monochromatic due to an extremely narrow frequency range; and it can be focused and directed into very small areas using lens and mirror systems producing enormous power densities at the sites of application. The use of laser ablation has many theoretical advantages: it can be accomplished with a high degree of precision and control; the time required is far shorter than with other methods; it can be accomplished in a normothermic beating heart resulting in immediate assessment of the effect of the ablation on the cardiac rhythm (Figure 2); and at the end of the procedure, it is possible to assess the effects of the ablative procedure on tachycardia suppression. Experimental studies have demonstrated the feasibility of argon and Nd:YAG laser ablation.[9,15-17] The argon laser produces tissue vaporization. At the site of laser discharge, a circular lesion with a central crater surrounded by a coagulated rim of tissue is noted (Figure 3). These lesions are sharp and heal by formation of a homogenous scar that can reendothelialize. Thus, endocardial ablation is feasible as well as epicardial ablation (Figure 4). The Nd:YAG laser, however, produces tissue photocoagulation at lower energies with tissue vaporization occurring at higher energies. In our early studies, we defined the dose-response relationship for argon laser energy in myocardial ablation.

The size of myocardial lesion in both normal and diseased myocardium in different media was studied.[9,10] We have been able to define safe dose ranges for endocardial ablation in atrial, normal ventricular, or diseased ventricular myocardium. In diseased human ventricular myocardium, perforation was extremely uncommon even at energy densities of 1000 J/cm^2. Laser ablation results in elimination of electrical activity in the ablated myocardium secondary to tissue necrosis and vaporization.[15] Thus, arrhythmogenic tissue can be made electrically inert. Application of laser energy to the specialized conduction system of the heart can result in atrioventricular block, elimination of bypass tract conduction may be feasible, and finally, ventricular tachycardia ablation can be attempted.[12,13,18-20] Effects on myocardial function are extremely limited and early experimental and clinical studies demonstrated minimal deterioration in ventricular function.[16,17,20]

INTRAOPERATIVE APPLICATION

Encouraged by our experimental studies, we applied for an experimental protocol for clinical application in 1985. An investigational argon laser system was employed in conjunction with a laser catheter assembly. The FDA-approved clinical protocol was initiated at Newark Beth Israel Medical Center and now expanded to the Eastern Heart Institute, Passaic. The laser catheter employed a quartz optical fiber, and pulsed argon laser discharges were used for myocardial ablation. Preoperative and intraoperative mapping were performed in all patients to localize the arrhythmogenic substrate. The first patient underwent myocardial ablation for ventricular tachycardia in 1986. A total of 44 patients now have undergone laser ablation for the treatment of supraventricular and ventricular tachycardia.

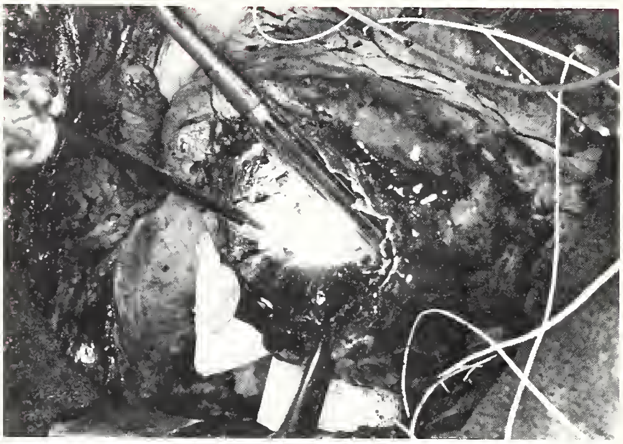

Figure 2. Endocardial ablation of ventricular tachycardia substrate in a patient with coronary artery disease. Preoperative and intraoperative mapping localized the site of ventricular tachycardia origin to the posterior wall of the left ventricle in this patient. Intraoperative pulsed argon laser radiation to the left ventricular endocardium at this site was used for endocardial ablation. Note the transcatheter delivery of laser energy that produces a series of adjoining endocardial lesions. (Reproduced with permission from Brachmann, Dietz, Kubler (eds), *Heart Failure and Arrhythmias,* Heidelberg, FRG, Springer-Verlag, 1990.)

Twenty-five patients have undergone laser ablation of ventricular tachycardia. All patients had coronary artery disease with a mean age of 62 years. Twenty of these patients underwent concomitant coronary artery bypass surgery and one patient underwent mitral valve replacement for preoperative severe mitral regurgitation. The mean left ventricular ejection fraction was 35 percent. The sites of ventricular tachycardia origin were in the anterior or antero-septal left ventricle in 52 percent, in the infero-posterior left ventricle in 38 percent, or in the lateral left ventricle in 10 percent. A total of 51 ventricular tachycardias were ablated with an average of approximately 2 per patient. Normothermic ablation during the induced ventricular tachycardia was feasible and immediate cessation of ventricular tachycardia was demonstrated (Figure 5). Laser energy alone was used for ablation at 43 sites (84 percent). The remainder were ablated with either laser energy combined with mechanical resection (12 percent) or mechanical resection alone (2 percent). All patients had one or more ventricular tachycardias ablated by laser energy alone. The perioperative 30-day mortality was 4 percent. This was due to noncardiac causes. During followup, only two

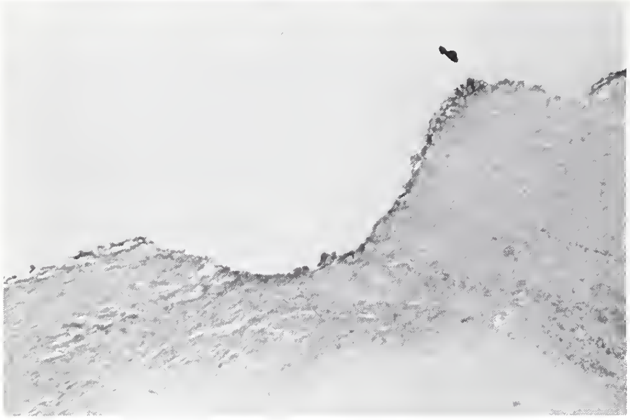

Figure 3. Histologic section of a lesion induced by pulsed argon laser discharges in a patient undergoing intraoperative laser ablation of ventricular tachycardia. Note the crater with little carbonization in diseased human ventricle [magnification of photograph 30 times.] (Reproduced with permission, *Catheter Ablation of Cardiac Arrhythmias,* Boston, MA, Martinus Nijoff Publishing, 1988, p. 125.)

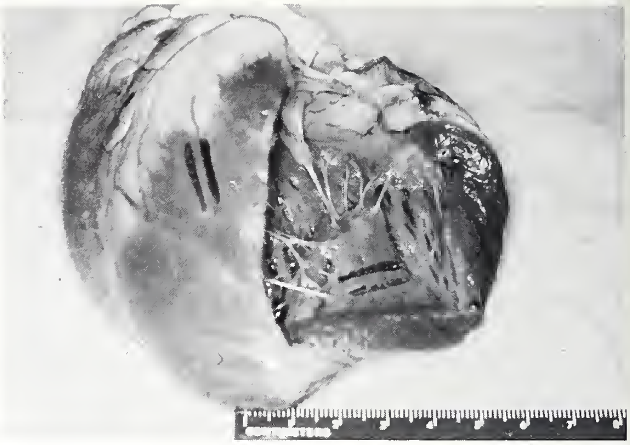

Figure 4. Epicardial and endocardial laser ablation in an excised bovine heart. Linear endocardial and epicardial ablative lesions can be achieved using pulsed argon laser discharges. (Reproduced with permission, *PACE* 9:547, 1986.)

patients had recurrences of ventricular tachycardia requiring further therapy. One patient became responsive to previously ineffective drug therapy and the other patient received an implantable pacemaker-cardioverter-defibrillator, Medtronic model 7216A. There have been two deaths during followup, one from gastrointestinal bleeding and liver failure and a second patient died during sleep. The latter has been classified as an unwitnessed sudden death. The overall survival data are shown in Figure 6.

The results of laser ablation for refractory ventricular tachycardia compare very favorably with the available information regarding other techniques in current literature. The perioperative mortality for map-guided subendocardial resection in the larger series has ranged from 12 to 15 percent.[4,8] The postoperative sudden death rate has been 4 to 5 percent annually and the recurrences of ventricular tachycardia have been reported to be as high as 28 percent. Lower success rates for subendocardial resection have been noted in patients with inferior, posterior, and septal sites of origin. Laser ablation has the equivalent efficacy at all sites in the heart. Other centers also have reported a high degree of efficacy with laser ablation. Svenson employed a Nd:YAG laser for surgical ablation of ventricular tachycardia,[21] with a cure rate of 100 percent although the perioperative mortality was higher (12 percent). This may reflect the choice of laser energy and patient selection. The long-term survival with cryoablation also is significantly inferior to those reported for laser ablation.[8] The long-term survival of cryoablation in a large multicenter series was 55 percent at three years.

In comparison to other nonpharmacologic modalities for ventricular tachycardia, laser ablation remains an attractive choice. Catheter ablation of ventricular tachycardia with direct current shock energy has been reported to have a 5 percent perioperative mortality, a 20 percent major complication rate, and a 34 percent long-term failure rate in arrhythmia suppression. While the two patient populations may not be directly comparable, this provides considerable cause for reflection. The implantable cardioverter-defibrillator has been shown to be highly effective for prolonging arrhythmic survival in patients with ventricular tachycardia or fibrillation. While the sudden death mortality for patients receiving implantable cardioverter-defibrillators has been reported to be less than 5 percent annually, there is considerable controversy over the long-term total survival of patients with such devices. Estimates of five-year survival have ranged from 40 to 70 percent. When reviewing the early survival information during intermediate-term followup, total mortality was 18 percent at three years in our series with laser ablation.[19] While this, again, may not necessarily reflect comparable patient populations, currently available information would suggest laser ablation is an effective therapeutic option for a well-defined subset of patients with sustained ventricular tachycardia.

Laser ablation for the treatment of supraventricular tachycardia has been performed in 15 patients. Six of these patients had a documented accessory bypass tract and no evidence of other cardiac disease. In these patients, the laser energy was used for endocardial ablation and in 2 patients atrioventricular groove dissection was achieved as well. One patient had laser ablation alone for elimination of bypass tract conduction whereas in 5 other patients the combined laser and mechanical ablation procedure was undertaken. Antegrade conduction in five bypass tracts in 4 patients could be successfully eliminated on a chronic basis with no recurrence

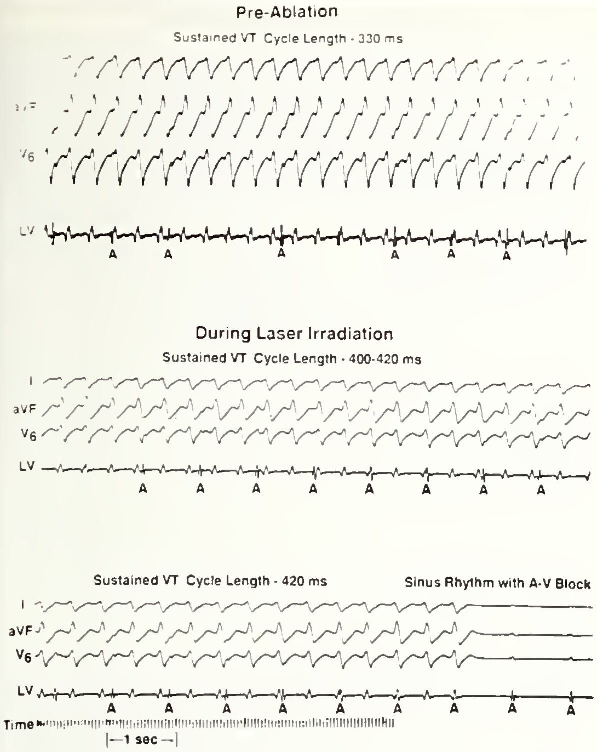
Pre-Ablation
Sustained VT Cycle Length - 330 ms
V6
LV
A A A A A A
During Laser Irradiation
Sustained VT Cycle Length - 400-420 ms
I
aVF
V6
LV
A A A A A A A A
Sustained VT Cycle Length - 420 ms
Sinus Rhythm with A-V Block
I
aVF
V6
LV
A A A A A A A A A
Time
1 sec

Figure 5. Effect of pulsed argon laser radiation on induced sustained ventricular tachycardia. Intraoperative mapping-guided endocardial ablation of diastolic electrical activity in the left ventricular septum was performed in this patient. Note the progressive slowing of the tachycardia that terminates after two minutes of laser irradiation. This tachycardia subsequently was suppressed postoperatively without spontaneous recurrence of inducible tachycardia on laboratory testing. Abbreviations: ECG leads I, a VF and V_6 ; LV = left ventricular electrogram; A = atrial electrogram; VT = ventricular tachycardia; A-V = atrioventricular. (Reproduced with permission, *J Interventional Cardiol*, 1990.)

during followup. In 2 patients, recurrence of bypass tract conduction was observed but in 1 patient it had been modified sufficiently to prevent tachycardia recurrence. The other patient became responsive to antiarrhythmic drug therapy to which he had been previously refractory. Nine patients had refractory supraventricular tachycardia in the presence of major organic heart disease. This included coronary artery disease in 5 patients and cardiomyopathy in 4 patients. Ablation of atrioventricular nodal conduction was performed in 3 of these patients with laser energy alone. Conduction could be interrupted in 1 patient and modified in 2 patients. Permanent pacemaker insertion after interruption of atrioventricular nodal conduction was necessary in one patient only. Accessory bypass tract ablation was performed in the remaining 6 patients. Successful interruption of conduction could be demonstrated in all patients postoperatively. However, during followup, resumption of bypass tract conduction was observed in 2 patients of whom only one continued to have recurrent tachycardia that now could be controlled on previously ineffective drug therapy. Five of these patients with coronary artery disease underwent coronary artery bypass surgery and there were significant perioperative complications in this group. These perioperative complications included patient mortalities due to perioperative myocardial infarction secondary to graft occlusion, cardiogenic shock due to pump failure, and acute respiratory failure probably due to pulmonary embolism and deep vein thrombophlebitis. One patient with Ebstein's anomaly died of delayed biventricular failure and sepsis during followup. These complications appeared to be directly related to the associated myocardial disease and were unrelated to the laser ablation. However, the feasibility of laser catheter ablation alone for interruption of normal or anomalous atrioventricular conduction has been conclusively demonstrated. The importance of this observation is related directly to the current direction of ablative therapy which utilizes percutaneous catheter techniques.[22] Since laser energy can be applied using a flexible catheter delivery system unlike

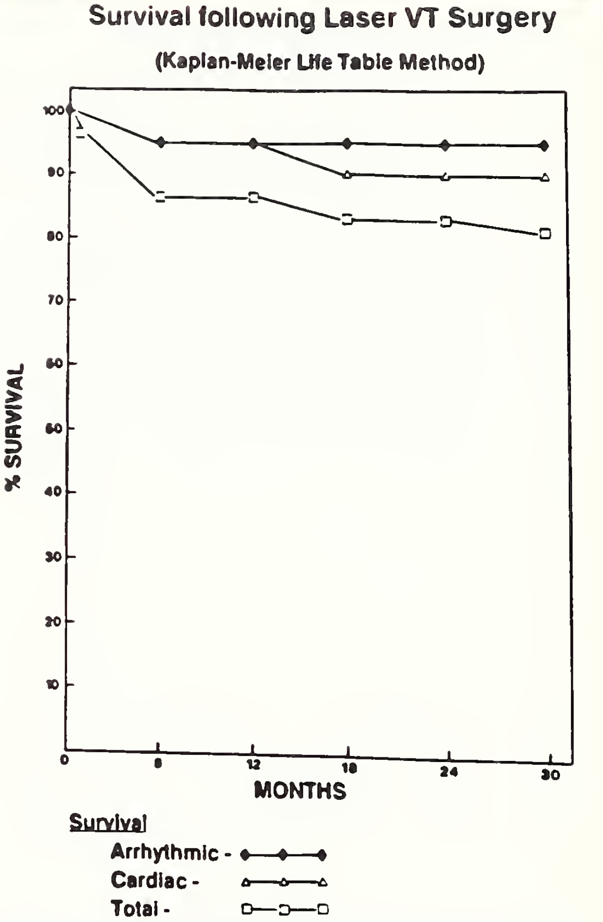

Figure 6. Life-table analysis of clinical outcome of study population with refractory sustained ventricular tachycardia/ventricular fibrillation using the Kaplan-Meier method. Note the high degree of arrhythmia control and survival in this population. One patient was lost to followup and the cause of death was acute myocardial infarction. This death is only shown in the total survival data. (Reproduced with permission, *J Interventional Cardiol*, 1990.)

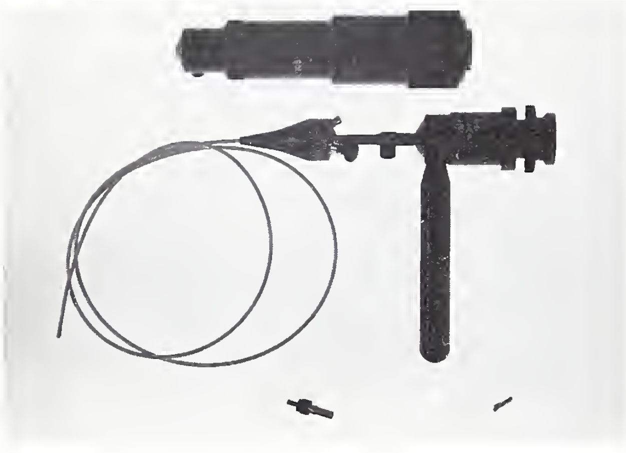

Figure 7. Laser catheter and angioscope assembly used in early experimental work. (Reproduced with permission, *PACE* 9:534, 1986.)

mechanical energy or cryoablation, this has long-term investigative importance.[23]

FUTURE DEVELOPMENTS

The major promise of laser catheter ablation is the possibility of percutaneous use.[23] The percutaneous approach offers the promise of much greater patient safety with the elimination of the need for open heart surgery and its attendant risks. Current technologic hurdles to the application of laser catheter ablation need to be addressed, including the ability to perform adequate mapping using catheter delivery systems. The next major technologic obstacle to laser catheter ablation is precise direction of the laser beam to the site of application. This is a more quantifiable objective and visually and electrically directed ablation is under evaluation (Figure 7).

Laser energy can be considered for both intraoperative application, particularly in situations where standard surgical techniques are inadequate, or as an adjunct to such techniques and in the future for percutaneous catheter application. ■

REFERENCES

1. Cobb LA, Werner JA, Trobaugh GB: Sudden cardiac death. *Mod Concepts Cardiovasc Dis* 49:31-36, 1980.
2. Durrer D, Schoo L, Scheilenberg RM, Wellens HJJ: The role of premature beats in the initiation and termination of supraventricular tachycardia in the Wolff-Parkinson-White syndrome. *Circulation* 36:644-649, 1967.
3. Josephson ME, Horowitz LN, Farshidi A, et al.: Recurrent sustained ventricular tachycardia: 2. Endocardial mapping. *Circulation* 57:440-448, 1978.
4. Miller JM, Kienzle MG, Harken AH, Josephson ME: Subendocardial resection for ventricular tachycardia: Predictors of surgical success. *Circulation* 60:624-629, 1984.
5. Saksena S, Hussain SM, Wasty N, et al.: Long-term efficacy of subendocardial resection in refractory ventricular tachycardia: Relationship to site of arrhythmia origin. *Ann Thor Surg* 42:685-689, 1986.
6. Klein GJ, Sealy WC, Prichett ELC, et al.: Cryosurgical ablation of the atrioventricular node-His bundle: Long-term followup and properties of the junctional pacemaker. *Circulation* 61:8-15, 1980.
7. Lawrie GM, Pacifico A, Kaushik R, et al.: Does amiodarone increase the risk of direct surgical ablation of ventricular tachycardia? *Circulation* 80(IV):II-42, 1989.
8. Borggrefe M, Podczeck A, Ostermeyer J, et al.: Long-term results of electrophysiologically guided antitachycardia surgery in ventricular tachyarrhythmias: A collaborative report on 665 patients, in, Breithardt G, Borggrefe M, Zipes DP (eds), *Non-Pharmacological Therapy of Tachyarrhythmias.* Mt Kisco, NY, Futura Publishing Co., 1987, pp. 109-132.
9. Saksena S, Gadhoke A: Laser therapy for tachyarrhythmias: A new frontier. *PACE* 9:531-550, 1986.
10. Saksena S, Ciccone J, Chandran P, et al.: Laser ablation of normal and diseased human ventricle. *Am Heart J* 112:52-60, 1986.
11. Sanborn T, Faxon D, Haudenschild C, Ryan T: Experimental angioplasty: Circumferential distribution of laser thermal injury with a laser probe. *J Am Coll Cardiol* 5:934-938, 1985.
12. Narula OS, Bharati S, Chan MC, et al.: Microsection of the His bundle with laser radiation through a pervenous catheter: Correlation of histologic and electrophysiologic data. *Am J Cardiol* 54:186-192, 1984.
13. Narula OS, Boveja BK, Cohen DM, et al.: Laser catheter-induced atrioventricular nodal delays and atrioventricular block in dogs: Acute and chronic observations. *J Am Coll Cardiol* 5:259-267, 1985.
14. An HL, Saksena S: Comparative effects of radiofrequency and laser ablation in normal and diseased ventricular myocardium. *J Am Coll Cardiol* 13:175A, 1989.
15. Levine JH, Merillat JC, Stern M, et al.: The cellular electrophysiologic changes induced by ablation: Comparison between argon laser photoablation and high-energy electrical ablation. *Circulation* 76:217-225, 1987.
16. Saksena S, Hussain SM, Gielchinsky I, et al.: Intraoperative mapping-guided argon laser ablation of malignant ventricular tachycardia. *Am J Cardiol* 59:78-83, 1987.
17. Lee B, Gottdiener JS, Fletcher RD, et al.: Transcatheter ablation: Comparison between laser photoablation and electrode shock ablation in the dog. *Circulation* 71:579-586, 1985.
18. Saksena S, Gielchinsky I: Argon laser ablation or modification of the atrioventricular conduction system in refractory supraventricular tachycardia. *Am J Cardiol* 66:767-700, 1990.
19. Krol RB, Saksena S: Laser ablation for supraventricular and ventricular tachycardia: Present status and future promise. *J Intervent Cardiol,* in press.
20. Saksena S, Gielchinsky I, Tullo NG: Argon laser ablation of malignant ventricular tachycardia associated with coronary artery disease. *Am J Cardiol* 64:1298-1304, 1989.
21. Svenson RH, Gallagher JJ, Selle JG, et al.: Neodymium-YAG laser photocoagulation: A successful new map-guided technique for the intraoperative ablation of ventricular tachycardia. *Circulation* 76:1319-1328, 1987.
22. Scheinman MM: Catheter and surgical treatment of cardiac arrhythmias. *JAMA* 293:79-82, 1990.
23. Saksena S: Catheter ablation of tachycardia with laser energy: Issues and answers. *PACE* 12:196-203, 1989.
24. Saksena S, Lim F, Jr, Prasher S, An HL: Feasibility of transcatheter argon laser ablation for ventricular tachyarrhythmias. *Circulation* 76(II):IV-278, 1987.
25. An H, Saksena S: Comparison of radiofrequency and laser catheter ablation. *Rev Eur Tec Bio* 12:148, 1990.

Cancer Research in New Jersey

ANN MARIE HILL
FREDERICK B. COHEN, MD

The New Jersey State Commission on Cancer Research endeavors to support basic research in cancer by providing funds to New Jersey investigators. The Commission now is focusing attention on the important area of clinical research as well, including psychosocial and epidemiologic studies.

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The New Jersey State Commission on Cancer Research (NJCCR) was created by the Cancer Research Act of 1983 to promote research at nonprofit institutions throughout the state into the causes of cancer at the molecular and cellular level. Spurred by the alarming mortality rates cited for New Jersey in the "Atlas of Cancer Mortality for U.S. Counties, 1950-1969," and concern that New Jersey was not attracting its fair share of federal research dollars, the Act concluded: "Benign neglect had been responsible for delaying the development of services and facilities necessary to conduct productive research." The law insisted that "corrective measures should be adopted promptly and funded adequately to make up for lost ground." It charged the Commission with taking the necessary steps to make New Jersey competitive in the area of cancer research. Dedicated funds of $1 million, appropriated annually from the cigarette surtax, were provided to effectuate the purposes of the act.

Originally nine Commission members, including representatives from the medical, scientific, and business community, were appointed by the governor with the consent of the Senate; in 1985, an amendment expanded membership to 11 persons.

The first task of the newly formed Commission was to decide how best to carry out its mandate. Lewis Thomas, MD, president emeritus of Memorial

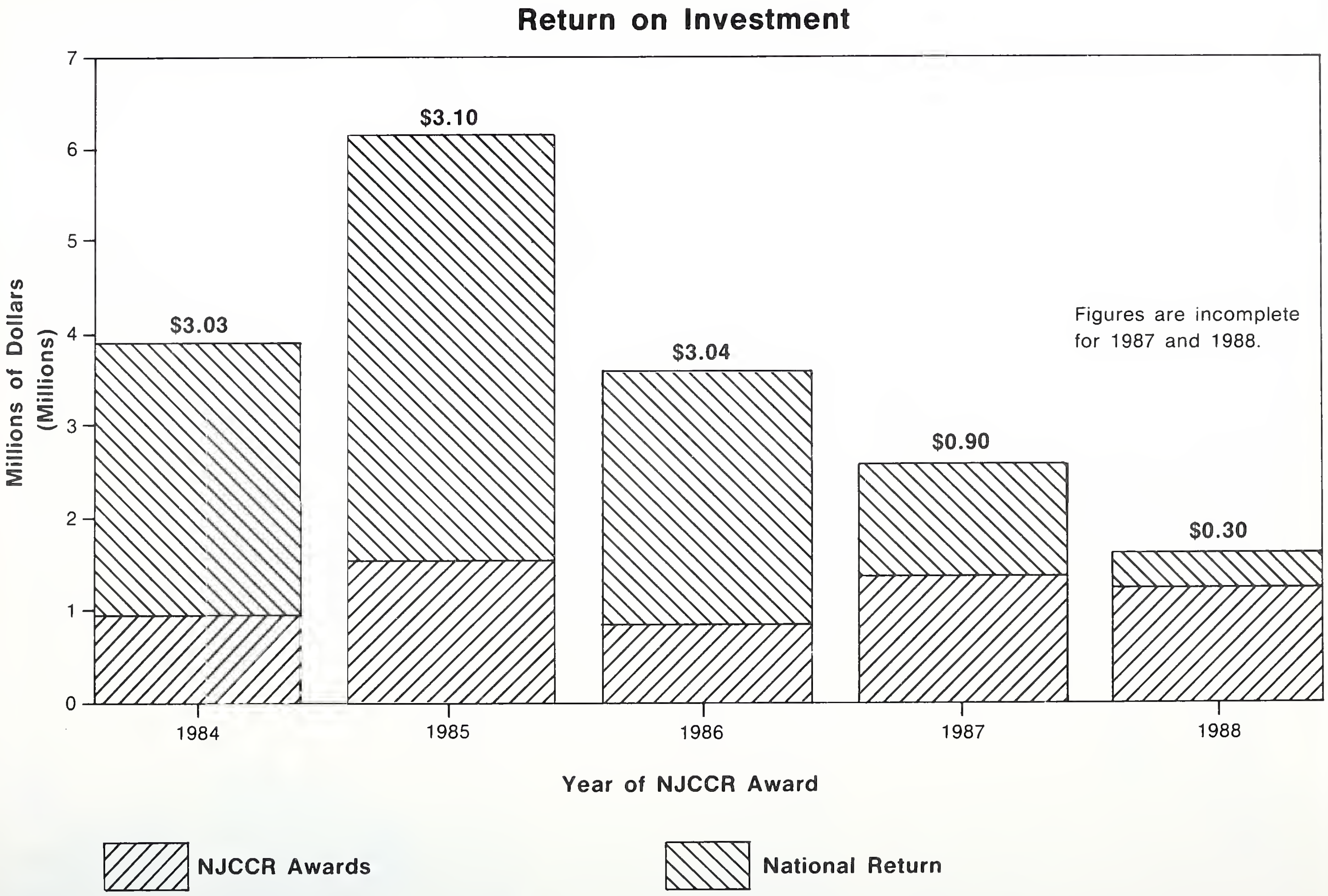

Figure. Commission on Cancer Research funding. Dollar figures indicate the return for each dollar NJCCR awarded in the year shown. Funding adjusted for out-of-state displacement.

Sloan-Kettering, has pointed out, "Almost by definition basic research is unpredictable and this is especially true for the kinds of fundamental inquiry relevant to the problem of cancer."[1] It, therefore, would be difficult, if not impossible, to set in advance an infallible course for the future. After serious thought, the Commissioners agreed that the only sure way of approximating this in cancer research is to invest in talented people. After considering a variety of alternatives, it was agreed that a competitive grant program providing seed money for promising new investigators or established investigators embarking on new areas of research would be the most effective use of the NJCCR funds. Through the preliminary data derived from such grants, it was expected that researchers would be better equipped to compete in the national arena. A system of rigorous review carried out by world-renowned cancer researchers from outside the state was designed to evaluate the quality of applications. Based upon this scientific review, grants were awarded.

Since its first cycle in 1984, the Commission has awarded over 120 grants at a total cost of $7.2 million. Most of these grants have been basic laboratory studies covering a vast array of topics including almost every subdiscipline of cancer.

It often is difficult to determine the impact of funding for cancer research. Small parts may become important pieces in the larger puzzle. However, the Commission sees its support as an investment for the state, and actively tracks the national funding generated from its grants. While it takes almost three years before preliminary data are available and applications are completed, the return on investment from Commission grants appears to be close to $3 for every $1 provided (Figure).

The original terms of the Cancer Research Act stipulated that an appropriate research project would have to focus on the genetic, biochemical, viral, microbiological, and environmental causes of cancer. Not included in the original classification were behavioral, epidemiological, psychosocial, or clinical studies. In a meeting with representatives of the National Cancer Institute in 1984, it was recommended that the Commission broaden its mandate to include these areas. It was recognized that the unique geographical size, the demographics, and its high rates of certain cancers made New Jersey an almost perfect natural laboratory. Such a wider scope would allow the Commission to deal with the cancer problem in the state on several fronts. In 1985, a bill to this effect was signed by former Governor Thomas Kean.

While this broadened mandate secured a more realistic mission for the Commission, it also brought into question the adequacy of its funding base. It became obvious that the Commission would be unable to establish a balanced program without dependable, sufficient funding. With this in mind, the Commission appealed to former Governor Kean and the Legislature to increase funding for cancer research. In response, the Commission's budget has been supplemented with additional appropriations of $1 to 2 million per year between 1985 and 1989.

To parallel these developments, the Commission and Senator Frank Lautenberg cosponsored, "A Working Conference on Cancer Research in New Jersey." One hundred forty cancer experts from throughout the state identified the needs of cancer research in New Jersey and made recommendations to address these needs. The findings from this conference were presented in a major report in 1987. At the same time, the Commission established six advisory groups, representing major areas of research, charged with bringing the recommendations in the report to fruition.

The advisory groups that include basic research, control and prevention, clinical, pediatrics, psychosocial/nursing, and radiation biology research have pursued independent strategies with the support of the Commission. The basic research advisory group worked hand in hand with the Commission to establish the New Jersey Cancer Research Fellowship. This program is designed to attract talented young scientists to institutions in New Jersey and to fill a vacuum created by reduced funding at the federal level for such activities. A 1985 survey conducted in response to an American Cancer Society report indicated that New Jersey requires four times as many fellows as it presently has to reach national averages. The program employs the same rigorous review process as the grant program. To date, 50 post- and predoctoral fellows have been supported by the Commission.

Recognizing that New Jersey offers unique opportunities for special topics of concern, the Commission initiated the Cancer Research Development Program in 1988. This program seeks to stimulate research in identified areas of significant interest for New Jersey, encourages collaborative and cooperative research, and provides seed money for pilot studies identified as priorities for future spending by national agencies. The Cancer Control and Prevention Advisory Group assisted the Commission in developing its first two topics, cancer among the economically disadvantaged and cancer and radon. Six grants were awarded including an evaluation of black and disadvantaged individual cancer data; a study of immune status and breast carcinoma in minority patients; an investigation of cancer risk factors in Hispanics, whites, and blacks in Newark; a project on preventive oncology conducted in the Newark and East Orange school districts; a study of radon-induced DNA damage in maternal and fetal tissues; and an assessment of human exposures to radon and radon progeny using personal monitoring. The results of these studies are preliminary. However, the experience gained in pursuing these projects will provide a base upon which New Jersey will build its research capabilities and be better equipped to solve these serious problems.

As the survival time for patients with cancer has increased, it has become imperative to deal with the social and psychological needs and problems of cancer patients. Research on such concerns is not developed at this time. The psychosocial/nursing advisory group has sponsored a series of conferences in which participants were encouraged to suggest research topics. As a result, the group has initiated several projects including the establishment of a psychosocial database for cancer patients.

In the clinical arena, the activities of the New Jersey Pediatric Hematology Oncology Network and the Cooperative Oncology Group of New Jersey have pursued parallel strategies. Both groups have sought to develop cooperative clinical trials within the state. The Network assures that children diagnosed with cancer in New Jersey are enrolled in national study groups. Finally, the group is negotiating with representatives from the pharmaceutical industry to undertake studies involving new technologies that may bring further benefits to children with cancer in New Jersey.

With several hundred physicians practicing in New Jersey having backgrounds in clinical research, the New Jersey Commission on Cancer Research encouraged the formation of the Cooperative Oncology Group of New Jersey (COGNJ). The objectives of the group include: bringing the advantages of research to patients in their own communities by permitting practicing physicians to participate in clinical research protocols; providing patients with new treatments as soon as they are available; reducing mortality by accelerating the community application of new treatments; allowing New Jersey oncologists to become expert in the use of new techniques and treatments; acquainting all New Jersey practitioners, even those not involved in research, with modern cancer treatments; encouraging clinical investigation of new products of New Jersey companies and laboratories and speeding the transfer of information from laboratory to clinic; educating the public in methods of cancer control and early detection; and contributing to the universal body of knowledge on human cancer. Under a contract from the Commission, the American College of Radiology provides administrative and statistical support for COGNJ. Development of protocols for breast, colorectal, and lung cancers began in July 1989. The group also became a subcontractor of the National Surgical Breast Adjuvant and Bowel Project (NSBABP) so patients treated for breast and colon cancers could be entered into adjuvant therapy trials. The group plans to expand with additional clinical trials in New Jersey, to be adopted each year for the next five years.

While it is clear that New Jersey has progressed substantially in its ability to mount a significant attack on its cancer problems, the resources necessary for such an effort have been lacking. It was recognized almost immediately that a permanent base of $1,000,000 per year is not sufficient to meet the needs of a sophisticated research program. Each year the Commission has been forced to seek supplemental funding through the state Legislature to maintain the minimum level of its activities. This places cancer research in New Jersey within the political arena where it can be affected by multiple factors often unrelated to the war against cancer, but able nonetheless to impede its progress. Since research projects require several years to complete, funding must be stable and long term. Further, a concerted effort to expand the state's reservoir of young scientists must continue. Only through the enactment of a long-term (at least five years) plan can we hope to achieve the goal of reducing cancer mortality by 50 percent in New Jersey by the year 2000. To this end, the Commission has developed a five-year comprehensive research program to address the state's needs in basic, clinical, psychosocial, and nursing as well as epidemiologic and environmental research. This will require a commitment of $5 million per year from the estimated $180 million derived from the new cigarette taxes.[2] The Commission feels strongly that it is a small investment to reap rich returns.

The New Jersey State Commission on Cancer Research (NJCCR) has made remarkable strides over the past seven years. Through its activities, state-sponsored cancer research has become a reality in New Jersey. NJCCR has been heralded by the National Cancer Institute and the National Cancer Advisory Board as a national model. But, New Jersey does not yet have the kind of dedicated resources to support its programs. New Jersey is at a critical stage in the war against cancer. What remains to be done to complete the job is to secure funding that is both stable and sufficient for a long-term program. Nothing less can guarantee success. ■

REFERENCES

1. Report: "Amercian Business Foundation for Cancer Research, Inc." Westport, Connecticut, 1986.

2. Estimated by Office of Legislative Services, A3608, 1990.

Biologic Therapy of Cancer

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Developments in molecular biology and advances in understanding tumor biology and the immune system promise to make the 1990s an exciting decade in medical approaches to cancer. We enter the 1990s with a newly enhanced armamentarium and new targets for drug development. The major areas of interest spurring new enthusiasm are: increased understanding and identification of oncogenes as potential targets for new drug development; new understanding of multidrug resistance and targeted programs; the coming of age of immunotherapy with alpha interferon as the first approved biological for oncology and interleukin-2 as well as monoclonal antibodies as novel approaches for recruiting the body's immune system to eradicate cancer cells. Added to this is our explosive growth in understanding the immune system's regulatory effector cells and their controlling factors and the availability of agents that literally can titrate a patient's hemoglobin, granulocytes, and macrophages at the physician's discretion.

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The pharmaceutical industry has identified oncology as a major therapeutic area for development and enters the 1990s in a very different posture than a decade ago. The most visible and publicized aspect of this change is the emergence of dozens of startup biotechnology companies whose research base is built upon monoclonal antibodies or recombinant DNA technology with diagnostic or therapeutic targets in oncology. However, many of the established pharmaceutical companies also have established major research and development programs in oncology in the last decade.

INTERFERONS

Interferons are proteins that regulate cell function, slow cell proliferation, and inhibit viral replication.[1] Three major classes of interferons (alpha, beta, and gamma) have been defined on the basis of physical, chemical, antigenic, and biological differences. By use of recombinant DNA techniques, a complete nucleotide sequence for alpha interferon was defined,[2,3] and a family of more than 17 physicochemically related interferon alpha proteins now has been defined.[4,5]

The first clinical trial of recombinant alpha interferon began in the early 1980s. In this trial and subsequent studies, the safety and efficacy of this compound as a single agent was investigated in the treatment of multiple solid and hematologic malignancies as well as other conditions, e.g. hepatitis. Alpha interferon (both 2a and 2b subspecies) has been found to be a highly effective single agent for the treatment of hairy cell leukemia and chronic leukemia of B-cell origin. This compound was approved in 1986 for marketing for this indication by the Food and Drug Administration (Roferon®-A and Intron®-A). Approximately 80 to 90 percent of treated patients experience a partial remission, and complete remissions are observed in approximately 5 percent of such treated patients. But antitumor activity has not been restricted to hairy cell leukemia, a fairly uncommon neoplasm. Encouraging results have been observed in a number of hematologic malignancies including chronic myelogenous leukemia, multiple myeloma, non-Hodgkin's lymphoma, and myeloproliferative disorders.[6,8,12]

Interferon also has been found to be useful in the treatment of some solid tumors. Approximately 20 percent of patients with disseminated renal adenocarcinoma have experienced complete or partial responses to alpha interferon.[9] Similar response rates have been observed in patients with metastatic malignant melanoma.[10] Response rates of 25 to 30 percent have been observed in patients with AIDS-related Kaposi's sarcoma treated with high doses of alpha interferon.[11] On the basis of this data, Roferon®-A and Intron®-A were approved for the treatment of select patients with AIDS-related Kaposi's sarcoma.

For most therapeutic agents in cancer, combinations frequently are more efficacious than single agents. The combination of alpha interferon with cytotoxic or other biological entities is being vigorously pursued, and already has yielded encouraging results. Wadler and colleagues have treated patients with colorectal carcinoma with a combination of alpha interferon and 5-fluorouracil; in 32 previously untreated patients with metastatic disease, 20 patients had partial responses.[13] The combination of alpha interferon and zidovudine in patients with AIDS-related Kaposi's sarcoma has enabled the use of lower and less toxic doses of alpha interferon, and combining alpha interferon with pentostatin has caused responses in patients with cutaneous T-cell lymphoma who are refractory to other therapy.[14] Alpha interferon in combination with dacarbazine has produced both complete and partial responses in patients with metastatic melanoma.[15] A study of particular interest is the combination of alpha interferon with 13-cis retinoic acid (Accutane®) in patients with advanced squamous and basal cell skin cancer. Retinoic acid, a naturally occurring metabolite of vitamin A, is an agent of cell differentiation that has been found useful in some hematologic disorders such as myelodysplastic (preleukemic) syndromes. Its major utility, however, has been in skin disorders. Patients with squamous or basal cell skin cancer have experienced significant disease regression with 13-cis retinoid acid, and the combination with alpha interferon is being pursued.

CGP 35269, a recombinant human alpha interferon, consists of amino acid sequences of both the B and D subspecies. Phase I trials have defined subjective and objective side effects that occur with its use. The quantitative frequency of side effects among patients and the qualitative nature of toxicities, have been equivalent to that observed with partially purified and purified interferons.[16,17]

However, the frequency of dose-limiting side effects, such as fatigue and anorexia, significantly were less after alpha interferon D administration than after alpha interferon A administration.[18]

INTERLEUKINS

A second area of biological therapeutic research involves the development of recombinant interleukin-2 (rIL-2) as an anticancer agent. Interleukin-2, a protein produced by activated T-lymphocytes, plays a central role in mediating many specific immune responses, as well as having the ability to stimulate the proliferation and function of cells useful in tumor regression. Naturally occurring interleukin-2 is present in insufficient amounts in the body to enable adequate study. The gene for human IL-2 production, therefore, was isolated, cloned, and inserted into the genetic material of *E. coli,* in a manner similar to that utilized for the production of alpha interferon. This recombinant product (rIL-2) was purified and readied for human clinical trials. As popularized by Dr. Steven Rosenberg, rIL-2, utilized either as a single agent or in combination with activated lymphocytes (LAK cells), was found to cause objective antitumor responses in 10 to 30 percent of patients with disseminated renal adenocarcinoma or malignant melanoma.[19] However, Dr. Rosenberg utilized a dosing regimen that required intensive care for many patients because of significant toxicity. The clinical utility of this compound in a variety of doses and regimens, both as a single agent and in combination with LAK cells, has been investigated further. The antitumor effects in a small percentage of patients with renal adenocarcinoma have been observed. It appears that rIL-2 is effective utilized as a single agent or in combination with LAK cells (adoptive immunotherapy). The requirement for LAK cells necessitates a sophisticated laboratory setting for the large-scale generation of these cells in a sterile environment. This may preclude the widespread usefulness of this mode of therapy by oncologists in the community. Additionally, higher doses of rIL-2 seem to be required to achieve objective responses in patients with malignant melanoma.

One of the most exciting aspects of the clinical development of rIL-2 has been the possibility of increased efficacy observed when this agent is combined with alpha interferon. Preclinical experiments indicate that the combination of the two agents seems to possess enhanced antineoplastic activity, as compared to each agent utilized separately. The mechanisms of this activity are uncertain but may include heightened expression of tumor cell surface antigens and stimulation of the activity of cytolytic cells. A large-scale clinical program utilizing the combination of these two agents in a variety of malignant conditions is underway. Thus far, early results indicate superior efficacy for the combination as compared to single agent rIL-2. More importantly, the studies are utilizing doses that are more tolerable and, therefore, can be administered on an outpatient basis. Recombinant IL-2 can be successfully administered by a portable infusion pump for prolonged periods of time, allowing continuous intravenous treatment, if required. This has allowed the investigation of long-term, low-dose continuous intravenous treatment with rIL-2.[20] If the efficacy of the combination of these two agents is significant, and if a tolerable and easily administered outpatient regimen can be formulated, this would be an important advance in the treatment of malignancies that have no established therapy.

Another aspect of biological therapy that has been approached is the combination of rIL-2 with other modes of therapy, particularly cytotoxic chemotherapy. The combination of cisplatin and etoposide with rIL-2 is being evaluated in the treatment of patients with non-small cell lung cancer, as well as a second similar regimen that includes cyclophosphamide. rIL-2 also has been combined with monoclonal antibodies in the treatment of patients with malignant melanoma. In addition, rIL-2 has been evaluated with gamma interferon in the treatment of solid tumors refractory to other therapy. Cisplatin has been added to the rIL-2/alpha interferon combination for the treatment of malignant melanoma, and cyclophosphamide has been added to the biological agent combination in the treatment of disseminated solid tumors. Fluorouracil has been added to the combination for the treatment of colon cancer patients, and other such combinations are being studied for the treatment of breast and head and neck cancer.

COLONY-STIMULATING FACTORS

A major consequence of most drugs used for cancer chemotherapy is suppression of blood cell formation, especially cells of the granulocyte and platelet lineage. Within the past decade, a number of proteins have been identified that exhibit remarkable abilities to stimulate growth and function of hematopoietic precursors. These molecules, designated colony-stimulating factors, are expected to alleviate bone marrow suppression induced by toxic chemotherapeutic regimens and permit patients to receive higher doses and more courses of their anticancer treatment.

The genes for several colony-stimulating factors have been isolated and the recombinant proteins themselves have been produced in large quantities in *E. coli* that contain the CSF genes. This has permitted their use in a variety of clinical oncology trials.

Granulocyte-macrophage colony-stimulating factor (GM-CSF) has been tested in a wide variety of clinical settings in patients receiving autologous and allogeneic bone marrow transplants. GM-CSF appears to shorten the duration of neutropenia and also hospitalization as well as decrease the incidence of serious infections in these patients. Myelodysplastic syndrome, a bone marrow disorder associated with myeloid and platelet agenesis also seems to respond to GM-CSF therapy. Generation of higher numbers of neutrophils and decreased incidence of infections are associated with treatment, and benefit ceases when administration of GM-CSF is halted.

GM-CSF also is being evaluated presently in patients receiving intensive chemotherapy to reduce the nadir and duration of neutropenia and thereby will permit patients to have more prolonged and intense treatment with potentially effective anticancer drugs.

Interleukin-3, multi-CSF, stimulates early hematopoietic progenitor cells in the bone marrow to proliferate and later differentiate in response to other cytokines. Testing of recombinant human IL-3 recently has been initiated as a single agent or in combination with GM-CSF as therapy for patients receiving bone marrow transplants, for myelodysplastic syndrome and aplastic anemia, and for patients receiving intensive chemotherapy regimens. It is expected that IL-3 will expand early precursor pools of blood cells that will differentiate more rapidly and in greater numbers upon administration of CSFs that stimulate cells that arise later in the hematopoietic lineage. However, it is more significant that this approach signals the advent of therapy using combinations of biological molecules that will minimize specific risks of intensive treatment with chemotherapy and radiation. This new path could enhance tumor responses by allowing patients to receive more extreme cancer treatment regimens.

ENDOCRINE TUMORS

Endocrine tumors, especially those of neuroendocrine origin, have been a significant focus for drug development. The somatostatin analog, octreotide (Sandostatin®), has a longer half-life and induces fewer side effects than the parent compound, yet is remarkably effective therapy for certain rare tumors known as VIPomas (tumors that secrete vasoactive intestinal peptide) and metastatic carcinoid tumors. This drug also is being tested for its effectiveness in diminishing the severe diarrhea associated with AIDS as well as other disorders of gastrointestinal hypersecretion.

Several solid tumors, including breast cancer and lung cancer, express receptors that will bind somatostatin. It is not known whether these receptors possess growth regulatory functions and can be suppressed by exposure to somatostatin, but this possibility is being evaluated. Further, the presence of such surface markers on some solid tumors serves as the basis for a novel diagnostic approach. Octreotide has been coupled to the radioisotope indium and injected into animals that carry tumors with somatostatin receptors. Within hours, the tumor can be clearly detected by radionuclide scanning and background emission is minimal due to the limited distribution of radionuclide (kidneys and bladder only). Similar approaches using monoclonal antibodies have been hampered by high background counts observed in the lungs, liver, and kidneys.

MULTIDRUG RESISTANCE

There is clear evidence that cancer cells either start out or become resistant to the cytotoxic drugs used to destroy them. In many instances, the same cancer cells are resistant to a broad spectrum of agents that possess neither structural nor functional similarities. This resistance, designated multidrug resistance (MDR) has been demonstrated to be mediated by a specific glycoprotein of 170,000 dalton molecular weight. This glycoprotein, known as P170, is a drug efflux pump that possesses 12 transmembrane domains as well as two ATPase catalytic sites.

A number of drugs, including calcium channel blocking agents, calmodulin inhibitors, and cyclosporine A, will inhibit the ability of the P170 to remove cytotoxic drugs and can effectively reverse the MDR phenotype of many cancer cell lines in vitro. This activity also can be demonstrated for MDR tumors transplanted into mice in vivo. Since most agents that will inhibit MDR also possess other potent pharmacologic activities (cardiovascular effects, sedation, and immunosuppression), analogs of cyclosporine A (Sandimmune®) have been evaluated that will block MDR without causing immunosuppression. Several compounds have been identified that are active in vitro and in mouse tumor models in vivo; these agents will enter clinical trials in the near future.

CONCLUSION

Significant efforts are being made by the New Jersey pharmaceutical industry directed not only at developing clinically useful drugs but also at answering the basic scientific questions in the field of oncology that will enable scientists to develop the therapies of the future. ■

REFERENCES

1. Baron S, Dianzani F, Stanton GJ, Fleishman WR Jr (eds): *The Interferon System*. Austin, TX, University of Texas Press, 1987.
2. Mantei N, Schwarzenstein M, Streuli M, et al.: The nucleotide sequence of a cloned human leukocyte interferon cDNA. *Gener* 10:1-10, 1980.
3. Goeddel DV, Yelverton E, Ullrich A, et al.: Human leukocyte interferon produced by coli is biologically active. *Nature* 287: 411-416, 1980.
4. Nagata S, Mantei N, Weissman C: The structure of one of the eight of more distinct chromosomal genes for human interferon alpha. *Nature* 287:401-408, 1980.
5. Goeddel DV, Leung DW, Dull TJ, et al.: The structure of eight distinct cloned leukocyte interferon cDNAs. *Nature* 290:20-26, 1981.
6. Talpaz M, McCredie K, Kantarjian H, et al: Chronic myelogenous leukemia; hematological remissions with alpha interferon. *Br J Haematol* 64:87, 1986.
7. Talpaz M, Kantarjian HM, McCredie K, et al.: Hematologic remission and cytogenetic improvement induced by recombinant human interferon alpha-A in chronic myelogenous leukemia. *N Engl J Med* 314:1065, 1986.
8. Talpaz M, Kurzrock R, Kantarjian H, et al.: Recombinant interferon-alpha therapy of Philadelphia chromosome-negative myeloproliferative disorders with thrombocytosis. *Am J Med* 86:554, 1989.
9. Buzaid AC, Todd MB: Therapeutic options in renal cell carcinoma. *Sem Oncol* 16:12, 1989.
10. Legha SS: Current therapy for malignant melanoma. *Sem Oncol* 16:34, 1989.
11. Krown SE: Approaches to interferon combination therapy in the treatment of AIDS. *Sem Oncol* 17:11, 1990.
12. Olsen EA, Rosen ST, Vollmer RT, et al.: Interferon alpha-2a in the treatment of cutaneous T-cell lymphoma. *J Am Acad Dermatol* 20:395, 1989.
13. Wadler S, Wiernik PH: Clinical update on the role of fluorouracil and recombinant interferon alfa-2a in the treatment of colorectal carcinoma. *Sem Oncol* 17:16, 1990.
14. Foss F, Fischmann A, Schechter G, et al.: Phase II trial of pentostatin and interferon alfa-2a in advanced mycosis fungoides/sezary syndrome. *Proc ASCO* 8:276, 1989.
15. Bajetta E, Negretti E, Gianotti B, et al.: Phase II study of interferon alpha-2a and dacarbazine in metastatic melanoma. *Proc ASCO* 8:286, 1989.
16. Gutterman JU, Fein S, Queseda J, et al.: Recombinant human leukocyte A interferon: Pharmacokinetics, single-dose tolerance, and biological effects in cancer patients. *Ann Intern Med* 96:549-556, 1982.
17. Scott GM, Secher DS, Flowers D, et al.: Toxicity interferon. *Br Med J* 282:1345-1348, 1981.
18. Hawkins MJ, Borden EC, Merritt JA, et al.: Comparison of the biological effects in man of two recombinant human interferon alpha (rA and rD). *J Clin Onc* 2:221-226, 1983.
19. Rosenberg SA: The development of new immunotherapies for the treatment of cancer using interleukin-2. *Ann Surg* 208:121, 1988.
20. Ritz J, personal communication.

Responsible Weight Loss in New Jersey

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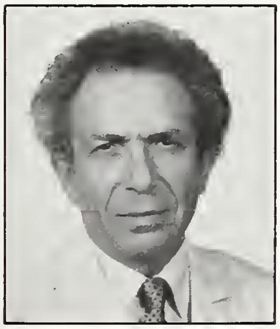
Very low-calorie formula diets (VLCDs) are an accepted method of achieving safe and effective weight loss for the morbidly obese. Under supervised medical surveillance and with a support team of dietitians and patient counsellors, weight loss of 40 or more pounds is achieved in 80 percent of patients. The authors present guidelines for assessing responsible weight loss programs along with a list of programs available in New Jersey.

Obesity represents a major health hazard.[1-5] In 1956, approximately 16 percent of American men were estimated to be obese and 5 percent were severely obese;[5] in women, the numbers are greater, with 42 percent of women classified as obese or severely obese. Data from the National Health and Nutrition Education Survey II (NHANES) demonstrate the problem is intensifying; a third NHANES study is underway, with emphasis on inner-city residents in whom obesity approaches epidemic proportions. The medical complications of obesity include accelerated cardiovascular disease, hypertension, diabetes mellitus, hyperlipidemia, gallbladder disease, obstetrical complications, pulmonary abnormalities, endocrine-related neoplasms, and accelerated degenerative joint disease.[1-9]

The use of very low-calorie diets (VLCDs), less than 800 K cal/day, has introduced a new modality for achieving major weight loss. Success rates of 40 or more pounds of weight loss have been reported at 60 to 80 percent by several VLCD programs.[10-12] The early use of VLCDs was tainted by the rampant use of low-quality liquid protein supplements that were widely advertised and injudiciously used. The resultant negative publicity of the VLCD approach was highlighted in the critical article, "Liquid Protein Mayhem"; Van Itallie condemned the unsupervised commercialism in the field and called for the medical community to take control of the weight loss effort in a responsible manner.[13]



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Despite the "liquid protein mayhem" of the 1970s, a scientific database demonstrated that high-quality VLCDs, appropriately supervised by knowledgeable physicians, were effective methods of achieving significant and safe weight loss. New generation protein supplements were developed with greater biologic value precluding most of the complications of earlier preparations.[14-16] Specifically, the newer generation VLCDs were not associated with cardiac abnormalities after careful prospective monitoring.[16] The medical community gradually began to accept the use of VLCDs as a bonafide method for achieving major weight loss.

On November 15, 1988, the celebrated television personality Oprah Winfrey announced to her audience that she lost 67 pounds by participating in a medically supervised VLCD program using Optifast®. This dramatic media event immediately provoked a new frenzy of public interest in the use of VLCDs. Programs in existence at that time were flooded with calls and many could not, nor did they want to, handle the new volume of patients wanting the "quick fix." In the aftermath of the Oprah Winfrey event, a consumer-driven interest in VLCDs spawned a new generation of commercial ventures into the weight loss field. These ventures took the form of franchised commercial weight loss centers promoted by major national advertising efforts, de-emphasizing the medical aspect of weight loss; powdered protein supplements available at supermarkets with no medical monitoring; and copycat protein supplements marketed to private physicians to dispense from office practices. This new wave of commercialism of VLCDs again has sensationalized weight loss and de-emphasized the role of carefully supervised programs.

The current state of weight loss again has become chaotic, provoking warnings of severe consequences by the scientific community as well as provoking congressional inquiries.[17] In this current era of "mayhem II," serious physicians interested in recommending patients for major weight loss are in a quandary as to where and to whom they can refer obese patients for safe and effective weight loss.

THE OPTIFAST® MODEL

In view of the urgent health hazard presented by widespread obesity in our New Jersey community, we developed an outpatient VLCD program in 1976 fashioned after the method of Genuth and Vertes.[10] This approach called for withdrawal from food and substitution with protein formula of high biologic value. We used the protein supplement based on the Genuth formula, Optifast®, prepared by Delmark Pharmaceutical Co. and then by Sandoz Nutrition. During the initial years (1976 to 1980), patients received a 45 g protein supplement of 300 K cal/day. Since 1980, the manufacturer uses a higher protein formulation consisting of 70 g protein from pasteurized egg whites, calcium caseinate, and nonfat dry milk sources (420 K cal/day). The Optifast® supplement contains 100 percent of the recommended daily allowance of known vitamins and trace metals as well as 1,900 mg potassium, 30 g carbohydrate, and 2 g fat. Optifast® is taken five times daily, along with 64 oz fluid and a fiber supplement. Supplemental use of 20 meq K+ has been limited to those patients with a history of diuretic use.

After attending a free orientation lecture, patients are scheduled for an initial medical evaluation. Much attention is paid to the presence of coexisting medical illnesses and patients are evaluated carefully for their ability to participate in the program. With increasing experience, we have found that many illnesses of great concern initially can be handled readily during weight loss. In particular, type II diabetes mellitus generally can be handled on an outpatient department basis, with insulin withdrawal guided by C-peptide responses. Hypertension is monitored and most if not all antihypertensive medication can be withdrawn after a few weeks. Contraindicating medical conditions and relative contraindicating medical illnesses are presented in Table 1.

Table 1. ***Contraindicating medical conditions and illnesses.***

Medical Contraindications for Very Low Calorie Diets

1. Recent myocardial infarction (less than three months)
2. Recent cerebrovascular accident
3. Pregnancy and nursing
4. Type I diabetes mellitus
5. Active infectious diseases (TBC and AIDS)
6. Previous history of anorexia nervosa

Relative Contraindicating Conditions

1. High-dose steroids, asthma, lupus
2. Adolescence, preadolescence
3. Previous addictive illnesses, bulimia
4. Dialysis dependence

Following initial physical examination, basal chem-zyme profiles, thyroid functions, and electrocardiogram, patients begin the Optifast® regimen on an outpatient basis. A patient returns for weekly visits; at each visit, the patient is seen by the treating physician for medical evaluation and attends a group behavior modification session. Complete blood count and multiphasic chemistry profiles are obtained every other week to monitor changes in uric acid, electrolytes, blood sugar, liver function tests, and lipid profiles. Repeat electrocardiograms are performed after three to four months or as indicated when ectopy is heard, or if the patient complains of palpitations.

Our first year's experience with Optifast® observed initial first week weight loss 11.0 ± 3.0 pounds in men and 7.7 ± 2.1 pounds in women. Subsequent weight loss proceeded at the average weekly rate of 4.2 ± 1.0 pounds in men and 3.0 ± 1.0 pounds in women.[11] Our eight-year experience with 4,026 patients demonstrated similar rates of weight loss (Figure).[12] A 1989 survey demonstrated similar rates of weight loss.

We have been impressed by the improvement of coexisting medical illnesses, as the results of weight loss. The ameliorative effects of weight loss on hypertension, diabetes mellitus, hypertriglyceridemia, and hypercholesterolemia have been extended to include an ameliorative effect on obstructive sleep apnea.[11-12] Other groups have reported similar improvement in pre-existing medical illnesses after VLCD-induced weight loss.[17-18] Complications remain minimal with no evidence that modern-day VLCDs are associated with cardiac arrhythmias or cardiac toxicity.[14-16] Although there is current concern that VLCDs provoke cholelithiasis, we encounter only five to ten cases a year (less than 1 percent) of clinically significant cholelithiasis/cholecystitis and these occur uniformly during the refeeding phase. Table 2 lists effects of weight loss on coexisting medical problems.

COMPONENTS OF A RESPONSIBLE PROGRAM

Responsible and knowledgeable physician leadership. Modern-day VLCDs are associated with few and manageable medical problems. Nonetheless, a modified fast is a stress stimulus that alters body metabolism changes, hormone production, and drug clearance and often alters coexisting medical problems. Physicians caring for patients undergoing VLCDs should have thorough training in areas of clinical nutrition as well as knowledge of changes in body composition, energy metabolism, and cardiac function during calorie restriction. Ideally, physicians with backgrounds in endocrine and metabolic diseases are best trained in these areas, although other physicians dedicated to acquiring this information also are suited. Physician directors of VLCDs should be readily identifiable and available to patients. A responsible program should have a call-back system and emergency call system so patients have access to physician advice.

Behavior modification sessions. Group behavior modification sessions are an important component of a responsible weight loss program. Previous data clearly demonstrate that weight loss is improved by adjunctive use of behavior modification efforts.[18-20] Patient counsellors trained in group psychodynamics and behavior modification methods provide ongoing education and group support. In our experience, the weekly 45-minute group session is equally important, if not more so, than the 15-minute medical check. Dietitians are an important part of the treatment team providing nutritional advice, lectures, and assistance to patients during periods of life events. Exercise physiologists, clinical psychologists, and psychiatrists provide an ad-

Table 2. ***Effect of weight loss on coexisting medical problems.***

1. Medical Problems Improved by Weight Loss

Hypertension
Diabetes mellitus (type II)
Hypercholesterolemia
Hypertriglyceridemia
Menstrual irregularities and infertility
Sleep apnea
Pickwickian syndrome
COPD
Lumbosacral disc syndrome
Osteoarthritis—weight-bearing joints
Gastritis, peptic ulcer disease,
irritable bowel syndrome

3. Medical Problems Generally Unchanged by Weight Loss

Cardiac arrhythmias, under control
Psychiatric disorders
Hypohyperthyroidism
Hirsutism, PCO
Chronic renal disease
Lupus, scleroderma
Sarcoidosis
Cancer, in remission

2. Medical Problems that may be Exacerbated by Weight Loss

Gout
Cholelithiasis
Addictive disorders

Table 3. ***Responsible weight loss programs in New Jersey.***

Optifast® Programs

Metabolic & Nutrition Service-Newark
Metabolic & Nutrition Service-Paramus
Metabolic & Nutrition Service-Wayne
Metabolic & Nutrition Service-Roseland
Metabolic & Nutrition Service-Princeton
Doctors On Duty-Union
St. Mary's Hospital-Hoboken
Raritan Bay Medical Center-Perth Amboy
Riverview Medical Center-Red Bank
Somerset Medical Center-Somerville
The Medical Center at Princeton-Princeton
St. Francis Medical Center-Trenton
Newton Memorial Hospital-Newton

HMR Programs

Pascack Valley Hospital-Westwood
Healthfast-Hackensack
The General Hospital Center at Passaic-Passaic
Immedicenter-Bloomfield
Alliance For Weight Management-Morristown
Overlook Center for Weight Management-Summit
Healthstyles Weight Management-Long Branch
Medford Health Center-Medford
Atlantic City Medical Center-Atlantic City

Others

United Weight Control-Roseland
New Directions Program-Hackensack
New Directions Program-Hackettstown

ditional support network for patients going through the program.

Maintenance program. Patients need long-term guidance and relapse prevention during the process of refeeding.[12, 19-21] Pre-existing eating patterns need to be altered and problems associated with refeeding need to be carefully avoided. Supervision by dietitians guide patients through the realimentation process. This phase of the weight loss program clearly is the most strenuous and difficult component.

Overall program. An effective weight loss program goes beyond the narrow limits of a doctor-patient relationship; it is a programmatic activity where the patient receives multiple levels of support and education during the weight loss effort.

PROGRAMS IN NEW JERSEY

Although our own program used the protein supplement, Optifast®, the new generation protein amino acid supplements are of high biologic caliber, and differences between one supplement versus another are less important today than a generation ago. The components of a responsible weight loss program include the use of a high-quality protein supplement and high-quality medical leadership, behavioral counselling, group sessions, dietitian availability, and an active maintenance program. Responsible weight loss programs available to residents of New Jersey are presented in Table 3. ■

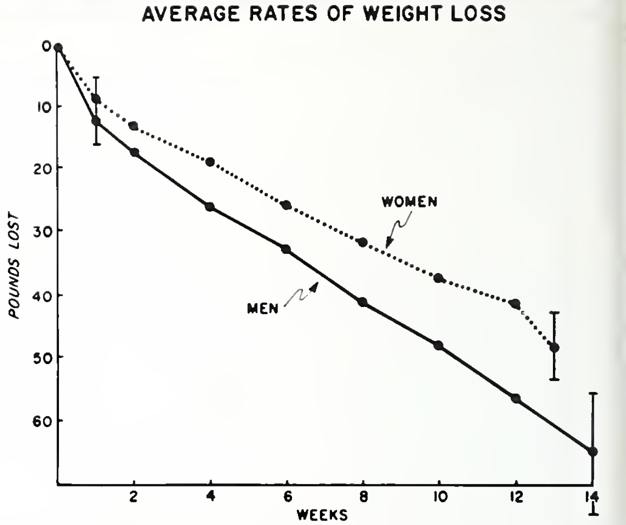

Figure. Average rates of weight loss during supplemented fasting program using Optifast®. After the initial week, men lost at a rate of 4.6 lb/wk, women averaged 3.1 lb/wk. Vertical bars represent standard errors. (Reproduced by permission, *Int J Obesity*)

REFERENCES

1. Bray GA, Davidson MB, Drenick EJ: Obesity: A serious symptom. *Ann Intern Med* 77:779-795, 1972.

2. Bray GA: *Major Problems in Internal Medicine.* Philadelphia, PA, WB Saunders, 1976.

3. Kopelman PG: Clinical complications of obesity. *Clinics Endocrinol Metab* 13:613, 634, 1985.

4. Van Itallie TB: Health implications of overweight and obesity in the United States. *Ann Intern Med* 103:983-988, 1985.

5. NIH Consensus Development: Health implications of obesity. *Ann Intern Med* 103:1073-1077, 1985.

6. Hubert HB, Feinlieb M, McNamara PM, Castelli WP: Obesity as an independent risk factor for cardiovascular disease: A 26-year followup of participants in the Framingham heart study. *Circulation* 67:968-977, 1983.

7. Kral SG: Morbid obesity and related health risks. *Ann Intern Med* 103:1043-1047, 1985.

8. Drenick EJ, Bale GS, Seltzer F, Johnson DS: Excessive mortality and causes of death in morbidly obese men. *JAMA* 243:443-445, 1980.

9. Kirschner MA, Schneider G, Ertel NH, Worton E: Obesity, androgens, and cancer risk. *Cancer Res* 42:3281-3285, 1982.

10. Genuth SM, Castro H, Vertes V: Weight reduction in obesity by outpatient semi-starvation. *JAMA* 230:987-991, 1974.

11. Kirschner MA, Schneider G, Ertel NH, Cortes G: Supplemental starvation: A successful method for control of major obesity. *J Med Soc NJ* 76:175-179, 1979.

12. Kirschner MA, Schneider G, Ertel NH, Gorman J: An eight-year experience with a very low-calorie formula diet for control of major obesity. *Intern J Obesity* 12:69-80, 1988.

13. Van Itallie TB: Liquid protein mayhem. *JAMA* 240:144, 1978.

14. Amatruda JM, Biddle TL, Patton ML: Vigorous supplementation of a hypo-caloric diet prevents cardiac arrhythmias and mineral depletion. *Am J Med* 74:1016-1022, 1983.

15. Lockwood DH, Biddle TL, Amatruda JM: Cardiac arrhythmias with collagen-based diets but not with more complete diets, in Blackburn GL, Bray GA, *Management of Obesity by Severe Calorie Restriction.* Littleton, MA, PSG Publishing Co., 1985, pp. 205-213.

16. Frank S, Colliver JA, Frank A, Verhulst MA: Electrocardiographic changes associated with weight reduction. *Int J Obesity* 11:27, 1987.

17. Wadden TA, Van Itallie TB, Blackburn GL: Responsible and irresponsible use of very low-calorie diets in the treatment of obesity. *JAMA* 263:83-85, 1990.

18. Palgi A, Read I, Greenberg L, et al.: Multidisciplinary treatment of obesity with a protein-sparing modified fast: Results in 668 outpatients. *Am J Pub Health* 75:1190, 1985.

19. Kanders BS, Blackburn GL, Lavin P, Norton D: Weight loss outcome and health benefits associated with the Optifast® program in the treatment of obesity. *Int J Obesity* 13:131, 134, 1989.

20. Wadden TA, Stunkard AJ, Liebschutz J: Three-year followup of the treatment of obesity by very low-calorie diet, behavior therapy, and their combination. *J Consult Clin Psychol* 86:925-928, 1988.

21. Perri MG, McAllister DA, Grange JJ, et al.: Effects of four maintenance programs on the long-term management of obesity. *J Consult Clin Psychol* 56:529-534, 1988.

22. Manson JE, Colditz GA, Stampfer MJ, et al.: A prospective study of obesity and risk of coronary heart disease in women. *N Engl J Med* 322:882-889, 1990.

Research in Sleep Medicine

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The field of sleep disorders medicine has matured into a respected area of medical science over the past two decades as basic and clinical research have defined the normal physiology of sleep and classified the clinical disorders of the sleep-wake cycle into a specific nosology.[1-4]

One major area of research involves the obstructive sleep apnea (OSA) syndrome. OSA is characterized by periods of repetitive upper airway collapse during sleep, causing asphyxiation. A myriad of neurogenic responses results in an eventual arousal associated with restoration of a patent upper airway and resumption of normal breathing, until the next apneic event. The typical apneic episode, by definition, will last greater than 10 seconds and up to 120 seconds (average 22 seconds) with long-term sequelae such as systemic and pulmonary hypertension, cor pulmonale, cardiac arrhythmias, and death. Due to repetitive arousals, these patients have an inadequate total amount and quality of sleep, resulting in excessive daytime sleepiness (EDS), the most frequent complaint of patients at a sleep center.

DIAGNOSIS OF OSA

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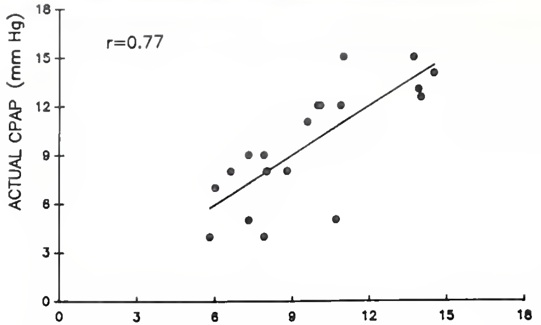
Sleep centers continue to search for a "screening tool" to supplement the history in order to determine which patients should undergo all-night polysomnographic testing, as well as an indicator for assessing the response to therapy. Flow volume curves (VVC) have been proposed to have such a screening value by determining the predisposition of the upper airway to obstruction.[5] Other means of evaluating the upper airway such as cephalometric x-rays,[6] computerized tomography,[7] and fiberoptic visualization[8] are primarily used for determining both the necessity and feasibility of surgical intervention.

We evaluated the effect of the sleeping position, i.e. supine posture, in enhancing the usefulness of the spirometric maneuver as a screening test for polysomnography. In our study of 48 patients with and without OSA, we examined the sensitivity and specificity of sawtoothing, maximal midexpiratory flow rate ratio (MMFRR) and flattening of the inspiratory limb of VVC performed in both the upright and supine positions. Each patient also had an all-night polysomnogram and arterial blood gas determination. The combination of an upright and supine VVC yielded a significantly higher sensitivity (89.3 percent) than upright testing alone (67.9 percent), when all criteria were examined. Although the sensitivity of sawtoothing alone in predicting OSA was low, its specificity as initially reported was high at 90 percent.

Our data revealed that by utilizing simple postural spirometric testing in patients who have a clinical history equivocal for OSA, patients who would have a very low yield on all-night polysomnography can be screened out. Testing, however, would be indicated in those patients with multiple VVC criteria present (especially sawtoothing) who were apt to have a significant number of disordered



[0.028 (%IBW) + 0.015 (A+HI) − 0.071 (SaO$_2$ NADIR) + 8.69 = CPAP]

Figure 1. Comparison of predicted positive pressure versus actual pressure required to maintain airway patency. The multiple regression analysis equation for predicted values is shown below the graph. IBW, ideal body weight; A + HI, number of apneas and hyponeas per hour; SaO$_2$ nadir, low point nocturnal saturation.

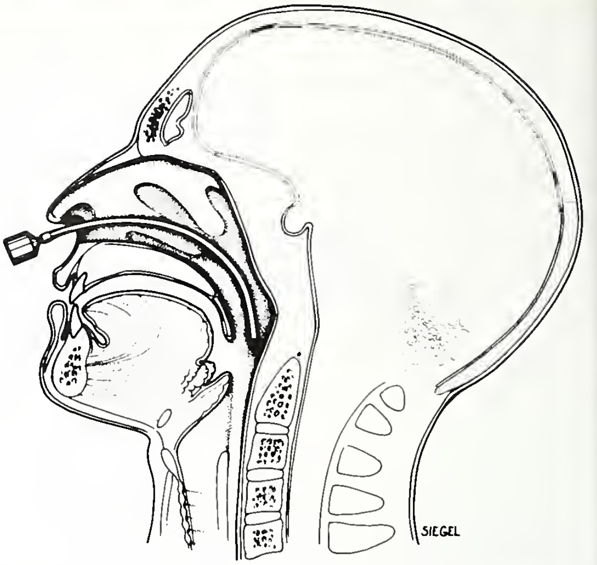


Figure 2. Treatment of OSA utilizing a nasopharyngeal tube ½ cm above the epiglottis.

breathing events (DBE) during sleep. In addition, with weight loss we also have demonstrated the utility of VVC by monitoring its return to normal as a means of determining when the patient should be retested with polysomnography.[9]

Some laboratories utilize a three-hour nap study as a screening test for OSA. The problem with performing nap studies is that short recording times and low percentage of rapid eye movement (REM) sleep lead to misdiagnosis or a significant underestimation of the number of DBE in OSA.[10]

EFFECTS OF OSA

The obesity-hypoventilation syndrome is characterized by apneas and the clinical findings of right ventricular dysfunction as well. The incidence of cardiac impairment is felt to be small and usually only with associated obstructive lung disease. Utilizing nuclear ventriculography, we have shown a much higher incidence of right ventricular dysfunction and a strong suggestion of associated left ventricular dysfunction as well.[13] This circumstantial evidence for ischemic cardiopathy and its treatment is being pursued in candidates for coronary surgery and pacemaker placement.

TREATMENT OF OSA-NCPAP

Nasal continuous positive airway pressure (NCPAP) is the most widely prescribed treatment modality for patients with OSA. NCPAP consists of a tight fitting nasal mask connected by flexible tubing to an air flow generator. The air pressure is transmitted to the nasal and oropharynx, acting as a pneumatic splint and preserving airway integrity. NCPAP is successful in virtually 100 percent of patients and tolerated by 66 to 75 percent of patients. Typically, the patient who has been diagnosed as having OSA will spend a second night of polysomnographic study in a sleep center while the technician slowly increases the pressure, until the disordered breathing events are eliminated. The patient then is prescribed a NCPAP home unit at that pressure.

There often is a delay between night studies of up to three weeks, leaving the severely apneic patient unprotected from the potential cerebral and cardiovascular catastrophes and daytime somnolence. To expedite treatment of the severe apneic, we performed an analysis of 24 patients who underwent NCPAP testing to determine which patient characteristics and sleep parameters could be used to predict the pressure required to eliminate the apneic episodes in order to initiate effective therapy without delay.[11] Utilizing multiple regression analysis, it was determined that percentage of ideal body weight, SaO$_2$ nadir and A+HI, were most closely correlated with required NCPAP (Figure 1).

Although NCPAP is the treatment of choice for patients with OSA, 25 to 35 percent of patients cannot tolerate NCPAP and in a small percentage of patients, NCPAP does not succesfully eliminate the apneic events. For these patients, we have introduced an alternative treatment modality for long-term management utilizing an uncuffed pediatric (3.0-4.0 mm) nasopharyngeal (NP) tube. This tube is passed through either nare, nasopharynx, and oropharynx, with its distal opening resting in the hypopharynx ½ cm above the epiglottis (Figure 2). Local anesthesia (4 percent xylocaine spray) is self-applied to the nasal mucosa. In a study of 44 patients fitted with the NP tube, 24 patients were restudied with the nasal catheter in place.[12] The NP tube was successful in two-thirds of these patients. The NP tube was found to be an effective alternative treatment for patients with OSA who could not tol-

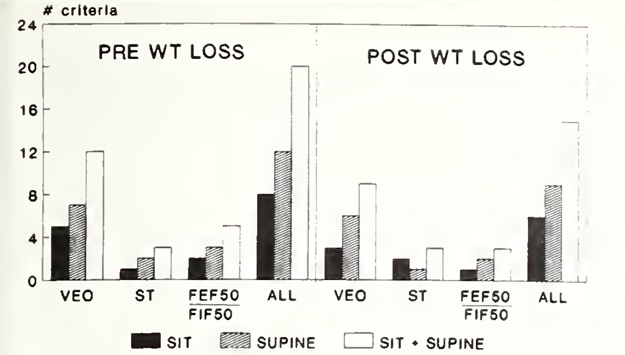


Figure 3. Comparison of upper airway obstruction criteria pre- and postweight loss. VEO = variable extrathoracic obstruction (flattening of inspiratory limb); SW = sawtoothing; FEF50/FIF50 = MMFRR; ALL = combination of all three criteria; SIT = sitting position.

erate NCPAP. It is most successful in patients who have mild to moderate OSA, i.e. A + HI < 60, and for those patients who are not morbidly obese. Some patients reserve the use of the NP tube for travel, preferring not to take along the compressor required for NCPAP. Another major indication for utilization of the NP tube has been during emergent situations in the intensive care unit. Patients with the obesity-hypoventilation syndrome presenting with malignant dysrhythmias, accelerated hypertension, CVA, respiratory failure, or myocardial infarction with the threat of prolonged apneic episodes, respond to a large bore (7.0 mm) NP tube with immediate resolution of their upper airway collapse and resulting asphyxiation.

Treatment of OSA usually involves a combination of weight loss and the application of positive airway pressure by NCPAP. The beneficial effect of weight loss on the severity of apnea has been documented;[14-17] however, the numbers of patients in these studies are small and the beneficial effects on awake gas exchange, arterial blood gases (ABG), and functional upper airway diameter have not been documented.

We examined the effect of weight loss on these parameters, as well as on the DBE.[9] Eighteen patients underwent all-night polysomnography followed by supine ABGs and maximal effort flow volume curves, pre- and post-weight loss. Their mean body weight decreased from 283 pounds to 227 pounds representing a decrease in mean percentage ideal body weight from 169 to 136 percent. The improvement in nocturnal oxygen saturation in part was attributable to an increased awake PaO_2 as well as a decrease in the severity of their OSA. The resting alveolar ventilation increased as well as reflected by the $PaCO_2$ that decreased from 49.6 to 38.9 mm Hg. All 6 patients with awake alveolar hypoventilation showed normalizaton of $PaCO_2$ after weight loss. Patients no longer were polycythemic with the mean Hb concentration falling from 15.8 to 13.9 gm/dL after weight loss.

Flow volume curves were useful in detecting improvements in DBE indices with a significant decrease in the number of upper airway obstruction criteria present after weight loss (Figure 3).

DISORDERS OF EXCESSIVE SOMNOLENCE AND IDIOPATHIC CNS HYPERSOMNOLENCE

The prototype clinical entity of the group of disorders of excessive somnolence (DOES) is the narcolepsy-cataplexy syndrome consisting of the tetrad of symptoms including irresistible sleep attacks, cataplectic episodes, sleep paralysis, and hypnogogic hallucinations.[18] Cataplexy is the sudden loss of motor tone resulting in partial or complete skeletal muscle paralysis. Emotional stimuli, such as laughter, anger, or elation are common precipitating events causing the patient to slump to the floor or, cause drooping of the jaw with inability to speak and subtle weakness of the neck, arms, or legs. This atonia occurs without the loss of consciousness.

Sleep paralysis consists of flaccid paralysis of the skeletal muscles upon awakening from sleep, while hypnogogic hallucinations are vivid, usually frightening visual and/or auditory hallucinations occurring at sleep onset.

Narcolepsy is mainly a disturbance of REM sleep, such that the "REM-on" cells are activated during periods of wakefulness provoking irresistible sleep attacks and the ancillary symptoms. However, it is also a disorder of non-REM sleep as well.

Idiopathic central nervous system hypersomnolence (ICNSH), another disorder of excessive somnolence, does not appear to be a REM-related disorder as there are no associated ancillary symptoms such as cataplexy. The pathognomonic sleep onset REM (SOREM) periods of narcolepsy are not observed during the multiple sleep latency test (MSLT). MSLT consists of a series of naps, separated by two hours in which the time it takes the patient to fall asleep, sleep latency (SL), is monitored. It provides for both an objective measure of daytime sleepiness and for the determination of the presence of SOREM periods. Sometimes referred to as non-REM narcolepsy, ICNSH produces quite severe daytime sleepiness with little relief attained from daytime naps (narcoleptics classically have refreshing naps).

To further assess the clinical and polysomnographic features of these two related disorders, we reported a retrospective study of 33 patients.[19] Twenty-four patients with narcolepsy and 9 patients with idiopathic central nervous system (CNS) hypersomnolence were compared. Patients with narcolepsy were both older at the time of diagnosis and had a longer duration of symptoms prior to a definitive diagnosis.

Nocturnal sleep studies confirmed both the fragmented sleep of narcoleptics and the normal sleep of idiopathic CNS patients. The idiopathic CNS hypersomnolence patients had a higher sleep efficiency of 89.9 percent as compared to 79.5 percent in the narcoleptic group. Of note, the percent stage three and four (deep) sleep was high normal in the idiopathic CNS hypersomnolence group (19.6 percent) and significantly lower in the narcolepsy patients (5.0 percent). As expected, the narcoleptic patients had a shorter REM latency of 34.2 min versus 92.9 min for the idiopathic CNS hypersomnolence group. The idiopathic CNS hypersomnolence group was equally "sleepy" as the narcoleptics as assessed by the MSLT.

Patients with narcolepsy tend to have a more fragmented night's sleep and are older at time of diagnosis, while patients with idiopathic CNS hypersomnolence have normal sleep architecture and sleep efficiency. Both groups are equally hypersomnolent. We currently are examining the psychological profile, memory, and treatment response in patients with narcolepsy and idiopathic CNS hypersomnolence.

DISORDERS OF THE SLEEP-WAKE SCHEDULE

Some patients suffer from a persistent sleep-wake schedule disorder such that their biological clock is "out-of-synchrony" with the normal clock time. These patients cannot fall asleep until the early morning hours and then will sleep a normal eight hours until the late morning or early afternoon and awaken refreshed. However, if they are aroused in the early morning to get ready for work or school, the patient will become belligerent, often demonstrating "sleep drunkenness," and will remain somnolent throughout the morning hours. These patients are suffering from delayed sleep phase syndrome and they have difficulty in attending school or maintaining their job, as chronic tardiness, morning sleep attacks, and absenteeism interfere with these responsibilities. In the past, the major chronobiologic treatment modality was phase delay, whereby the patient's bedtime and morning awakening would be altered by three hours each day until the good night time was normalized. Our use of light therapy has been included in the treatment regimen for these patients. By utilizing intense (10,000 lux) light at the proper time in the morning a patient's sleep cycle can be slowly advanced to a more appropriate schedule which is societal synchronized.

CONCLUSION

Sleep disorders medicine is a rapidly expanding field that has exhibited a logarithmic growth curve in the past two decades. The diversity of syndromes and combinations of disorders that may coexist make it imperative that a complete evaluation be performed on each patient. ■

REFERENCES

1. Dement W, Guilleminault C: Diagnostic classification of sleep disorders. *Sleep* 2:21-1211, 1979.
2. Bremer F: Ceveau isole et physiologie du sonmeil. *CR Soc Biol* 118:1235-1241, 1935.
3. Aserinsty E, Kleitman N: Regularly occurring periods of eye motility and concomitant phenomena during sleep. *Science* 118:273-274, 1953.
4. Rechtschaffen A, Kales A: A manual of standardized terminology, techniques, and scoring system for sleep stages of human subjects. Publication 204, U.S. Dept. of Health, Education and Welfare, Public Health Service, 1968.
5. Shore ET, Millman, RP: Abnormalities in the flow-volume loop in obstructive sleep apnea sitting and supine. *Thorax* 39:775-779, 1984.
6. Riley RW, Guilleminault C, Herran J, Powell N: Cephalometric analysis and flow-volume loops in obstructive sleep apnea. *Sleep* 6:303-311, 1983.
7. Haponick, EF, Smith PL, Bohlman ME, et al.: Computerized tomography in obstructive sleep apnea. Correlation of airway size with physiology during sleep and wakefulness. *Am Rev Resp Div* 127:221-226, 1983.
8. Browiecki B, Pollack CP, Weitzman E: Fiberoptic study of the pharyngeal airway during sleep in patients with hypersomnia sleep apnea syndrome. *Laryngoscope* 88:1310-1313, 1978.
9. Nahmias J, Fourre J, Karetzky M: Effect of weight loss on the upright and supine flow-volume curves, arterial blood gases and disordered breathing events in patients with obstructive sleep apnea. *Chest* 92:675, 1987.
10. Fourre J, Scoles V, Nahmias J, Karetzky M: The use of nap studies in the diagnosis of obstructive sleep apnea. *Sleep Res* 15:122, 1986.
11. Ramos R, Nahmias J, Karetzky M: Determinants of the magnitude of NCPAP in obstructive sleep apnea. *Sleep Res* 18:291, 1989.
12. Nahmias J, Karetzky M: Treatment of the obstructive sleep apnea syndrome using a nasopharyngeal tube. *Chest* 94:1142-1147, 1988.
13. Nahmias JS, Karetzky M: Assessment of risk factors for right ventricular failure in patients with the obstructive sleep apnea syndrome. *Chest* 94:615, 1988.
14. Smith PL, Gold AR, Meyers PA, et al.: Weight loss in mildly to moderately obese patients with obstructive sleep apnea. *Ann Intern Med* 103:850-855, 1985.
15. Browman CP, Sampson MG, Yolles SF, et al.: Obstructive sleep apnea and body weight. *Chest* 85:435-436, 1984.
16. Harman EM, Wynn JW, Block, AJ: The effect of weight loss on oxygen desaturation in morbidly obese men. *Chest* 82:291-294, 1982.
17. Sugerman HJ, Baron P, Fairman RP, et al.: Hemodynamic dysfunction in obesity hypoventilation syndrome and the effects of treatment with surgically induced weight loss. *Ann Surg* 207:604-612, 1988.
18. Nahmias J, Karetzky M: Current concepts in narcolepsy. *NJ MED* 86:617-622, 1989.

Monoclonal Antibody Therapy of Cancer

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The last decade has witnessed an unprecedented expansion of new knowledge on the complex interaction of host regulatory systems, including the immune system, and the control of cell growth and function. This has resulted in a new technology devoted to biologics acting as stimulators or inhibitors of specialized cellular functions and control mechanisms, and a diverse array of biological response modifiers (BRMs). A particular opportunity has been the application of BRMs to cancer therapy. Interferons were the first of these used in modern biotherapy, followed by interleukin-2, as well as various cytokines, such as other interleukins and growth factors, e.g. G-CSF, GM-CSF.[1] BRMs may exert either direct antitumor effects, work in concert with other host effector mechanisms, or stimulate the proliferation of normal hematopoietic cells affected by chemotherapy or radiation therapy. There also has been a recent resurgence of interest in tumor vaccines.[2]

Antibodies developed against cancer cells have been used in a number of ways to halt the growth of neoplasms, or even to affect tumor regression. The development of monoclonal antibody (MAb) technology by hybridization methods has resulted in a renewed interest in the use of anticancer antibodies in cancer therapy.[3] These MAbs can act by at least four mechanisms: activation of components or effector cells of the immune system, such as triggering complement- or antibody-dependent cytotoxicity; interference with growth or differentiation by binding to the tumor cells, such as to growth factors or receptors on the tumor cell surface; active immunization by the MAb, such as by an anti-idiotype vaccine; and delivery of toxic agents, such as drugs, toxins, and radionuclides. MAbs also can be used to enhance the activities of other BRMs, such as interferon and interleukin-2, that have independent antitumor actions. Further, MAbs have been used to direct effector cells to tumor by being conjugated to antibodies or factors specific for these effector cells.

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Specific passive immunotherapy of cancer by the injection of naked xenogeneic and allogeneic antisera made against cancer in a variety of animal hosts has been attempted for about 100 years, and has resulted in only anecdotal examples of response often accompanied with severe toxicity.[4-7] These antibodies generally were very impure and poorly characterized, thus preventing duplication in controlled trials. With the advent of MAbs, where large-scale production of uniform and identical antibodies could be generated, a more systematic approach to specific passive immunotherapy could be undertaken. The majority of such studies focused on the treatment of hematological neoplasms, and has involved more than 25 clinical trials in which over 135 patients have been treated with unconjugated MAb.[8] This study showed a complete remission rate of 5 percent, a partial remission rate of 16 percent, and 17 percent minor responses.[8] Such regressions, for the most part, were of short duration. Likewise, a variety of solid human tumors have been treated with MAbs, including melanoma,[9-11] neuroblastoma,[11] and colon carcinoma.[12-14] Since the majority of patients included in these studies were heavily pretreated and had advanced disease, it is likely that their immune systems were too compromised to respond to the immunotherapy. Nonetheless, MAbs given alone have shown definite antitumor effects in hematological and solid malignancies, and it is likely that methods to improve their effects, such as in a combination with various cytokines that activate different immune functions, will be developed.

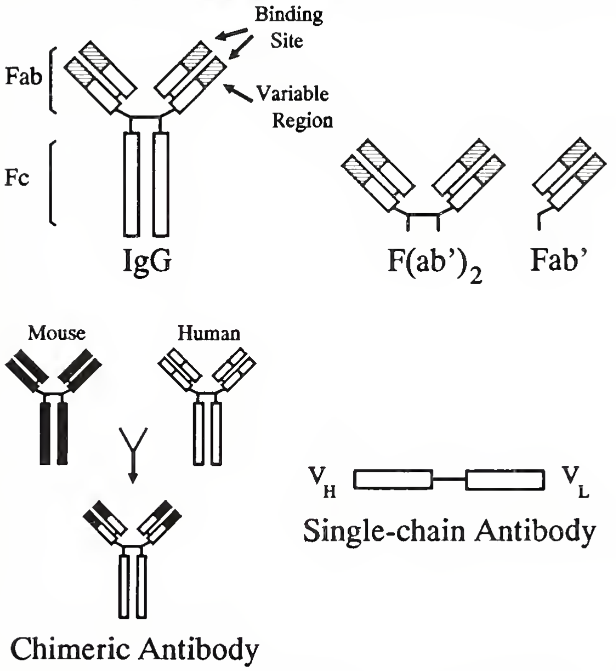

Figure 1. Schematic representation of immunoglobulin G, F(ab')$_2$ and Fab' fragments, chimeric antibody, and single-chain antibody forms.

In general, the overall results of naked MAb therapy have been disappointing, but they have expanded our knowledge of how such antibodies can exert their antitumor effects. As mentioned earlier, the three principal mechanisms are direct inhibition of cell growth by binding to cell surfaces; cooperating with host effector mechanisms to institute a lysis of tumor cells coated with antibody; and altering the host's immune system to initiate tumor rejection. These approaches have encountered a number of problems, many of which have limited further progress in the use of MAbs: 1) the presence of free circulating antigen that can complex with the injected MAb; 2) modulation or disappearance of the target antigen from the tumor cell; 3) heterogeneity of antigen expression; 4) the relatively low targeting and uptake of the injected MAb; and 5) the immunogenicity of murine MAbs. One immediate solution to some of these problems is to increase the potency of the MAb therapeutic by making the MAb a delivery vehicle for drugs, toxins, or radioactive agents. This review will focus on this alternative approach, the targeting of toxic agents to cancer, thus rekindling the concept expressed by Paul Ehrlich at the turn of the century: Zauberkugeln (magic bullets) as "bodies which possess a particular affinity for a certain organ" to carry therapeutic agents.[15] However, as attractive as this concept has been, it still is beset with four major limitations. First, MAbs truly specific for cancer have not been identified yet. Second, it is rare to find a MAb that is restricted even to a single cell type, such as a bronchial squamous cell cancer or a colonic adenocarcinoma. Such MAbs sometimes are reactive with many tumor types within a system, but more frequently reactive with many different cell types, as pancarcinoma antibodies. The most reknowned of these are carcinoembryonic antigen (CEA) antibodies,[16] that are reactive with gastrointestinal adenocarcinoma, squamous cell cancers, and adenocarcinoma of the lung, some mammary carcinomas, mucinous adenocarcinomas of the ovary, squamous cell carcinoma of the uterine cervix, and adenocarcinoma of the endometrium.[17] A third limitation of MAbs as targeting agents for a more specific cancer therapy is the relatively low uptake in tumor: less than 0.01 percent to 0.001 percent of the injected dose usually accretes per gram of tumor.[18] The result is that only a small portion of the injected dose of both antibody and cytotoxic agent arrives at the tumor.

The fourth major limitation involves the predominant use of MAbs generated in mice. When injected into humans who are not too immunocompromised, antibodies against these foreign proteins, termed human anti-mouse antibodies (HAMA), are formed, and these complex to and interfere with the targeting antibody.[19-21] This also has been a problem in the use of unconjugated MAbs, but in patients with lymphoma, the HAMA response appears to be more limited than in patients with solid tumors, presumably because of a greater immunosuppressive state in the former group.[22,23]

Despite these problems, impressive advances are being made in the use of MAb conjugates for cancer detection and therapy, and it appears that radiolabeled MAbs will be the first MAb agents to be added to the oncologist's armamentarium. The uses will be in the radioimmunodetection (RAID) and radioimmunotherapy (RAIT) of cancer. RAID is the

Table 1. *Isotopes for antibody imaging.*

Isotope	Half-Life	λ-Energy (keV)	Isotope Cost per Study ($)	Image Quality	Disadvantages
^{99m}Tc	6 h	140	<10	Excellent	Renal uptake
^{111}In	3 d	173, 247	75	Excellent	Liver and spleen uptake
^{123}I	13 h	159	180	Excellent	Availability
^{131}I	8 d	364	13	Not Good	β-emissions

Table 2. *Indications for antibody imaging.*

- Presurgical staging of extent of disease
- Postsurgical evaluation of residual disease
- Confirmation of viable tumor known by other methods
- Disclosure of recurrence in a patient with a rising tumor market titer in the blood
- Confirmation of tumor targeting of antibody to be used for chemoimmunotherapy or radioimmunotherapy

use of radiolabeled antibodies to detect lesions by external scintigraphy, whereas RAIT is the extension of these agents to targeted isotopic cancer therapy.[24] Both RAID and RAIT have been under investigation for many years, predating the era of MAbs,[25-27] but undoubtedly have had their most intensive attention since the advent of MAbs.[28-31]

RADIOIMMUNODETECTION (RAID)

Most current radiological methods used to disclose lesions depend upon anatomical changes. Antibody targeting involves a functional test, since it requires the production and presence of a target antigen bound by the antibody. For example, fibrous tissue, that could present a problem in computed tomographic interpretation of a postsurgical lesion, should not accrete radioactive antibodies. However, if a tumor lacks sufficient quantities of the target antigen, the antibodies may fail to bind to the tumor and deposit sufficient radioactivity to be detected by the gamma camera. Therefore, there is an important interaction between tumor and quantity of available antigen, quantity of antibody and radioactivity deposited, site of tumor and organ involved, and the scanning procedure. The two most important initial considerations are the specificity of the target antigen for cancer and the nature of the antibody used for targeting. The currently known cancer antigens are not restricted to cancer cells in terms of absolute specificity. However, many antigens of different chemical nature have been found to be increased in cancers and sometimes shed in increased quantity into the blood of patients with growing neoplasms. These antigens can serve as targets for tumor-localizing antibodies, even when they are shed into the circulation, where the administered antibodies can form complexes. When an antibody targets to a tumor antigen, it needs to have an uptake ratio of about 2:1 to background for imaging, while a minimal ratio of about 5:1 may suffice for therapy. The satisfactory ratio for imaging depends in part upon the scanning method used. Planar imaging may require a ratio of about 5:1, whereas single-photon emission computed tomography (SPECT), that slices through the body like a CT scanner, only detecting emitted radiation, requires much lower tumor/nontumor ratios, such as 2:1.[32] Thus, the absolute uptake of antibody in tumor is not critical for imaging, only the ratio of counts in tumor to those in adjacent tissues. Methods are available to increase this ratio, since this governs the method's resolution, such as the use of a form of the antibody that targets to tumor and clears from background, nontarget tissues rapidly: antibody fragments (Figure 1). The smaller the fragment, the more rapid the targeting and clearance from background, but also the shorter the magnitude of uptake in tumor. Therefore, Fab' and F(ab')$_2$ fragments of immunoglobulins are the preferred targeting agents for RAID, and it is conceivable that recombinant gene cloning methods will provide even smaller fragments, such as single-chain antibodies (SCA) for even more rapid tumor targeting (Figure 1). The smaller the size of the immunoglobulin, the lower its immunogenicity in humans. Hence, SCA and Fab' molecules may prove to be the best for human use in RAID because of their reduced evocation of HAMA responses, limiting the repeated use of these animal proteins. Of course, reengineered antibodies that have human regions of immunoglobulin combined with minimal amounts of the murine binding portion of the antibody would similarly decrease immunogenicity (Figure 1). Whether fragments of totally human monoclonal antibodies are the ultimately desired agents remains to be determined, since human MAbs have been difficult to generate and produce in large quantities.

The nature of the radionuclide used for imaging also is very important from the aspects of image quality, background activity, optimal imaging times, and cost. Table 1 summarizes the attributes of the more common radionuclides in use for RAID, and it is apparent why technetium-99m (^{99m}Tc) is the preferred agent in nuclear medicine. However, until very recently it has been a major problem to achieve a stable linkage of ^{99m}Tc to antibodies and preferably the fragments, since the short, 6-h half-life of ^{99m}Tc mandates that rapid tumor targeting be achieved. A number of groups recently have reported the successful labeling of antibodies and antibody fragments with ^{99m}Tc, and these agents are in various stages of clinical trials.[33-35] An example of rapid ^{99m}Tc-antibody targeting and imaging is shown in Figure 2, about three hours after injection of the agent, revealing multiple sites of cancer, some of which were not seen on CT scans. Therefore, now that the ^{99m}Tc-labeling technology has been solved, it is a straightforward process to select the appropriate anticancer antibodies for the RAID of many different tumor types. Obviously, pancarcinoma antibodies, such as against carcinoembryonic antigen (CEA), have the widest tumor application.

The potential and current indications for cancer RAID are summarized in Table 2. The two most well-established indications are: confirmation of a tumor site first disclosed by another method, such as by CT scan, whereby the RAID study provides additional functional information that the lesion is truly growing and producing a cancer-associated marker; and disclosure of recurrence by RAID in a patient in whom this is suspected, such as when there is a rising tumor-marker titer in the blood, e.g. CEA, AFP, hCG, but not detectable by any other methods.[37] The roles of RAID in initial diagnosis, in staging of cancer, in assessment of residual disease during or following surgery, and in qualifying an antibody for therapy, are in earlier phases of investigation, but nonetheless appear to be likely applications. To date, several thousand patients have been studied with radiolabeled antibodies in RAID studies, and usually between 60 and 90 percent of known lesions have been disclosed correctly, depending on the antibody and its form, the radionuclide, planar, and/or SPECT scanning methods. Table 3 summarizes the current status of cancer RAID, indicating that very small tumors have been revealed by this method, including occult neoplasms.[31,33,36-39]

RADIOIMMUNOTHERAPY (RAIT)

One of the earliest attempts at RAIT was recorded by Beierwaltes in 1951, when he achieved a nine-year

Table 3. ***Current status of antibody imaging.***

Subject	Findings
Safety	Radioactive antibodies have been found to be safe in over 7,000 patients studied worldwide.
Sensitivity	On a tumor-site basis, results between 60 and over 90 percent sensitivity and specificity have been reported, with the highest accuracy rates found for MAbs labeled with ^{131}I, ^{123}I, or ^{99m}Tc.
Small tumors	Tumors as small as 0.4 to 0.5 cm have been disclosed with ^{99m}Tc-MAbs, especially with emission tomography, but resolution usually is in the range of 1.0 to 2.0 cm.
Occult tumors	Tumors missed by other methods, including CT, have been revealed by antibody imaging.
Serum antigen	Antibody imaging can be positive even before the antigen titer in the blood is elevated. Complexation with circulating antigen does not compromise antibody imaging.
HAMA	Repeated injections of animal antibodies result in human antibodies against these foreign proteins, that can compromise antibody targeting.

Table 4. ***Isotopes for antibody therapy.***

Isotope	Half-Life	Decay Mode	Advantages	Disadvantages
^{131}I	8 d	β	inexpensive; images	Deiodination; thyroid uptake
^{90}Y	2.5 d	β	Indium chemistry	Leaches off chelate; bone uptake; no images
^{186}Re	3.8 d	β	Tc-chemistry; images	Availability
^{188}Re	17 h	β	Generator produced; Tc-chemistry; images	
^{67}Cu	2.5 d	β	Images	Availability
^{211}At	7 h	α; Electron capture	Iodine chemistry; short range	No images
^{125}I	60.4 d	Electron capture (Auger)	Short-range electrons	Poor images

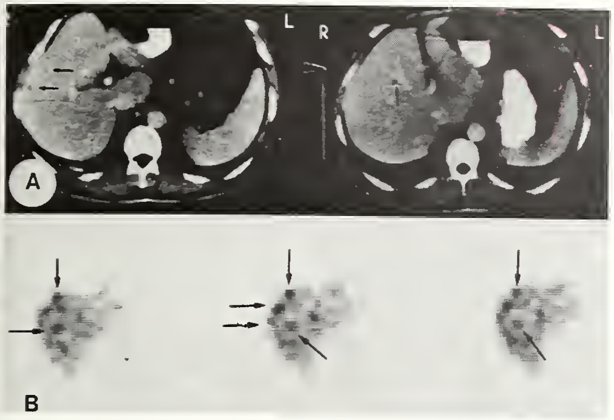

Figure 2. Following radiation to the rectum, a 56-year-old man underwent a resection for Dukes' C2 adenocarcinoma of the rectum in August 1988. In January 1989, he received additional local irradiation therapy and was started on chemotherapy, that consisted of leucovorin combined with 5-FU weekly. His plasma CEA ranged from 19 ng/mL in January 1989 to 53 ng/mL at the time of the RAID study in March 1989. The patient received 1 mg of Immu-4 (NP-4) anti-CEA MoAb Fab' labeled with 8.8 mCi ^{99m}Tc. The abdominal CT (A) taken 21 days before the RAID study shows multiple liver lesions (arrows). RAID in the three-hour transverse SPECT views of the abdomen (B) confirmed the lesions (arrows). The RAID studies demonstrated several additional lesions not seen on the CT scans (reprinted with permission).

complete remission of a metastatic melanoblastoma with a very low dose of iodine-131-conjugated (^{131}I-conjugated) rabbit immunoglobulin.[40] Spar completed clinical trials of RAIT with ^{131}I-labeled antifibrin antibodies reporting some tumor responses.[41] Clinical studies of RAIT were not pursued much further until interest was stimulated by the first clinical report of successful cancer detection by CEA-RAID.[25] The discovery of MAb production by Kohler and Milstein[3] then led to a flurry of activity, since pure MAbs could be generated to almost any tumor desired. However, progress has been slower in RAIT than in RAID, and this probably is due to RAID only requiring a differential ratio of counts in tumor as compared to adjacent tissues, whereas RAIT depends on dose and duration of radioactivity delivered relatively selectively to the tumor. The majority of studies have involved ^{131}I-conjugated to murine whole antibodies, and at present there is a paucity of evidence that radioiodinated MAbs by themselves have shown consistent and reproducible, major tumor responses. Order and coworkers at the Johns Hopkins Cancer Center have shown that when combined with other therapies, ^{131}I-conjugated antiferritin antibodies made in different animals can have important response rates (40 percent) in hepatocellular cancers.[42] Similar work by Lenhard in Hodgkin's disease,[43] and by others in various lymphomas,[44-48] have indicated that the radiosensitive lymphatic tumors respond much better to RAIT than the more frequent and lethal solid tumors. These findings support the conclusion that RAIT, if it can overcome the relatively low rad doses delivered to tumor, could eventually play an important role in the therapy of many cancers.[49]

Response rates in metastatic colorectal and other gastrointestinal cancer patients treated by RAIT, usually with ^{131}I-labeled CEA, MAbs generally are poor. The tumor doses achieved to date usually have been less than 2000 cGy, whereas more than 5000 cGy most probably is the minimum required for response.[49] In hepatocellular carcinoma, Order reported tumor doses of 1100 to 1200 cGy on the average, resulting in therapeutic responses when combined with doxorubicin and fluorouracil. The Johns Hopkins group reported 11 patients have had conversion of nonresectable to resectable hepatocellular cancer by the use of radiolabeled antibodies, and that of the 11 patients, 80 percent have shown a survival of more than three years.[42] This group also has reported on 37 patients with nonresectable intrahepatic cholangiocarcinoma.[50] Using radiation and chemotherapy induction followed by cyclic therapy with different ^{131}I-CEA MAbs, there was a 33 percent remission rate with a median survival of 6.5 months, and for remitters, the median survival was 15.2 months. The longest partial remission was four years.

Brady treated 15 patients with glioma with iodine-125-labeled (^{125}I-labeled) anti-epidermal growth factor receptor (EGFR) MAb, reporting one complete remission and two partial responses. The internalization of the ^{125}I radionuclide results in Auger electron irradiation, that is particularly cytotoxic to the cell nucleus.[51] ^{131}I-labeled antibodies to EGFR, or to placental alkaline phosphatase, were used by Kalofonos to treat 10 patients with recurrent grade III or IV glioma intravenously or by internal carotid artery infusions, and 6 patients showed clinical improvement lasting from six months to more than three years. Other antiglioma antibodies also have shown promising tumor targeting in patients.[53] Neuroblastoma- and melanoma-targeting antibodies have been developed and demonstrated by Cheung[54] to have antitumor effects both as naked antibody and when conjugated with ^{131}I.

Lymphomas and leukemias are preferred targets for RAIT because of their radiosensitivity and good vascularization, and patients having a poorer or infrequent HAMA response.[44-48] Our own studies with a new B-cell specific antibody, EPB-2 (or LL2), have demonstrated very good targeting in non-Hodgkin's B-cell lymphoma, as well as responses to low doses of ^{131}I-labeled MAb.[48,55,56] These encouraging results with this B-cell lymphoma MAb have stimulated our expansion of these trials to assess the effects of higher doses of radioactivity and of antibody, as well as the role of different dosage schedules.

It is clear that RAIT has become a field of intense investigation at the experimental and the clinical levels. What are the current problems and limitations, and how can these be overcome? It certainly is easier to identify the problems than the solutions, but it is reassuring from the studies cited that considerable progress has been made in RAIT, particularly in the past few years.

^{131}I is a very suitable radionuclide for therapy, having an average beta energy of 0.183 meV and a physical half-life of eight days for cytotoxic purposes, and emitting gamma rays for tumor imaging and quantitation. It also is very easy to label antibodies, and the minimal toxicity to normal tissues (hypothyroidism) and the extensive clinical experience with this isotope all favor its use. However, it has shown relatively low tumor dose rates of 5 cGy/h in clinical studies.[49] Other potential isotopes for RAIT are listed in Table 4. ^{125}I emits Auger electrons, whose short-range energy can affect the nucleus and, thus, destroy cells once the electrons are internalized. This isotope is being used after conjugation to MAbs against EGFR.[51,52] Yttrium-90 (^{90}Y) is a pure beta emitter of 0.937 meV with a physical half-life of 2.7 days, and has been used as a colloid preparation in the treatment of arthritis. In clinical experience, a much higher radiation dose to tumor is achieved with ^{90}Y conjugated to MAbs than with ^{131}I, but at increased host toxicity. One of the problems with this metallic radionuclide is the difficulty of achieving a tight and stable linkage to MAb, resulting in bone toxicity.[57] However, improved chelates are in development and testing stages.[58,59]

Rhenium-186 (^{186}Re) and rhenium-188 (^{188}Re) have gained much interest recently because of the similarity in their chemical properties to ^{99m}Tc. ^{186}Re has an average beta energy of 0.781 meV and a physical half-life of 3.8 days, and emits a gamma energy of 137 keV for imaging and quantitation of uptake. ^{188}Re has a maximum beta energy of 2.116 meV and a physical half-life of 17 h, with a gamma energy component of 155 keV for imaging and quantitation. In addition to beta-emitting isotopes, alpha emission from bismuth-212 and astatine-211, that irradiate at very short distances, have been used in laboratory studies, and appear to hold promise for the therapy of circulating tumor cells or of micrometastases.

It is apparent from this short list that many potential therapeutic radionuclides for conjugation to antibodies are available, but the problem has been to achieve tight and stable linkages of these isotopes in sufficiently high number to the antibodies without affecting the MAb's immunoreactivity and targeting properties. As advances are made in bioconjugate radiochemistry, more potential radionuclide candidates will enter RAIT trials. However, this will only partly affect the current limitation of only a small portion of the injected MAb becoming accreted in the target site. The advantage of RAIT is that the radiation deposited by an antibody can destroy cells at a distance, thus, not requiring antibody uptake by each cell in the tumor. Depending on the form of radiation, the distance can be large, such as with beta emitters, or short, as in the case of alpha energy. Thus, beta energy is more appropriate for large tumors, and those isotopes emitting energy traversing shorter distances are better suited for the treatment of very small tumors or clusters of tumor cells. Various methods to increase the tumor accretion of MAbs are under investigation, such as affecting tumor vascularization and vascular permeability, and increasing antigen expression.[60,61] A simpler approach has been the direct injection of the MAb into the tumor cavity, such as intrapleural and intraperitoneal applications.[62] Both ^{131}I-labeled and ^{90}Y-labeled MAbs have been administered intraperitoneally, and overall responses have been limited, with less extensive disease responding better than advanced cases.[63] Intrathecal RAIT also has been applied to neuroectodermal tumors,[64] and it seems that this does not result in any significant toxicity, thus holding much promise for the treatment of tumors in the cranium.

The administration of high and repeated doses of radiolabeled MAbs has been limited by the HAMA response and by myelotoxicity.[49,65] The former may be avoided by the development and use of human or humanized MAbs, while the latter may be overcome by autologous bone marrow transplantation and/or the administration of marrow-stimulating cytokines, such as interleukin-1, interleukin-3, granulocyte colony-stimulating factor, and granulocyte-macrophage colony-stimulating factor.[47,66]

It is apparent that many problems in RAIT need to be solved, and that its future may lie in its judicious combination with other cancer therapeutic modalities, such as an adjuvant with primary surgery, and in combination with chemotherapy to remit advanced malignancy. These opportunities will need to be studied once the basic issues of the physics, radiobiology, bioconjugate radiochemistry, antigen site, quantity and expression, antibody form, structure and immunogenicity, and tumor accretion are optimized. This form of systemic radiation therapy, which should serve as a prelude to chemoimmunotherapy, may provide a rational alternative to the treatment of already disseminated cancers, and to the reduction of dissemination in adjuvant protocols. ■

References available upon request.

Nuclear Cardiology:

Perfusion, Viability, and Function

MARGARET LAMANNA, MD

Nuclear cardiology research projects fall into two basic categories: myocardial perfusion and cardiac function. In the area of myocardial perfusion there has been a twelvefold increase in positron-emission tomography (PET) studies and a tripling in single-photon emission computerized tomography (SPECT) studies in the past five years. Cardiac SPECT research using 201 thallium as well as technetium-99m (^{99m}Tc) compounds for myocardial perfusion/function is underway. The advantages of technetium compounds lie in their ability to detect myocardial perfusion and myocardial function with a single injection.

MYOCARDIAL PERFUSION IMAGING

The purpose of myocardial perfusion imaging is to evaluate stenosis versus flow reserve of the myocardium; to evaluate stress versus rest imaging; to assist in the diagnosis/prognosis of coronary artery disease; and to determine myocardial viability. The issue of ischemia versus scar is key. The standard isotope for myocardial perfusion is thallium, a potassium analog (Table 1). Technetium-based myocardial perfusion imaging protocols include the use of cationic technetium complexes such as Cardiolite (isonitrile, RP 30A) and Cardiotec, a neutral lipophilic, highly extracted myocardial perfusion agent with rapid myocardial clearance—a technetium Bato compound. There are potential clinical advantages of technetium compounds; technetium is a superior isotope for imaging; it is compatible with planar/SPECT instrumentation; perfusion and function studies can be performed simultaneously; the isotope is readily available; there is flexible scheduling; and there is an opportunity to increase nuclear cardiology studies (Table 2). The potential clinical applications of these agents include their ability to detect both perfusion and function abnormalities (Table 3).

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Clinical trials of ^{99m}Tc teboroxime (Cardiotec) in patients who also received 201 thallium have been completed. The goals were to assess the use of ^{99m}Tc Cardiotec in patients who received a 201 thallium stress and a redistribution examination by comparing the Cardiotec imaging results with the results of thallium scintigraphy, and to determine the time savings associated with the use of technetium Cardiotec compared to the time required to perform a thallium stress and a redistribution examination. The total study time is approximately two hours for the technetium agents; five hours for thallium. The ^{99m}Tc isonitriles have been used in both adults and children to assess cardiac function and myocardial perfusion.

Also, there are several alternatives to treadmill and upright bicycle testing including arm ergometry, oral and intravenous dipyridamole, intravenous adenosine, and transesophageal atrial pacing. We participated in a multicenter crossover comparison of intravenous adenosine (Adenoscan®) versus exercise in the noninvasive assessment of coronary artery disease by SPECT.

Pharmacologic coronary vasodilation with dipyridamole has its limitations (Table 4). The oral preparation is slow in onset of action and involves a prolonged procedure. The recommended intravenous dose produces widely variable and frequently submaximal coronary vasodilation. Side effects such as chest discomfort, ST depression, arrhythmias, headaches, flushing, dizziness, lightheadedness, and gastrointestinal complaints are common with both preparations. Symptoms are not managed easily by dose reduction due to the relative long half-life of dipyridamole. Theophylline, a direct-acting adenosine antagonist often is required. We investigated the use of adenosine (Table 5), a potent coronary vasodilator, with rapid onset of action and an approximate half-life of ten seconds to induce coronary vasodilation in association with thallium SPECT scintigraphy. The postulated adenosine mechanisms (Table 6) include interaction with A1 and A2 receptors and altered synthesis of cyclic AMP; guanine nucleotide proteins are involved as mediators, and calcium ion movements are produced.

The purpose of this study was to determine the degree of concordance between Adenoscan® and exercise thallium in patients with angiographically significant coronary artery disease. Secondary objectives included the determination of the degree of sensitivity, specificity of Adenoscan® and exercise thallium in detecting significant coronary artery disease as defined by cardiac catheterization, and the determination of the reliability of Adenoscan® and exercise thallium to predict the location and severity of coronary artery disease (Table 7).

In addition, we investigated the effect of dipyridamole in moderate to severe coronary stenosis following cardiac catheterization; the purpose of the study was to evaluate the effect of dipyridamole on coronary blood flow in the presence of moderate to severe coronary artery stenosis. There were no adverse hemodynamic effects observed while on dipyridamole. There were no changes in the PR or QRS intervals. Nine stress EKGs were ischemic with and without dipyridamole. Thallium and cath scores were determined independently by doubleblinded observers. Analyzing the thallium bullseye polar plots display based on short-axis images, 7 regions were better on dipyridamole, 12 regions were unchanged, and 9 regions were worse (3 regions significantly were worse and 6 regions were mild). In all cases, there was greater than 75 percent stenosis of the RCA or the LAD. We concluded that dipyridamole in therapeutic doses causes hemodynamically significant redistribution in coronary blood flow.

TRANSESOPHAGEAL ATRIAL PACING

Transesophageal atrial pacing (TAP) is an ideal alternative to conventional stress testing in patients unable to exercise: patients in poor physical health, with peripheral vascular disease, thrombophlebitis, claudication, arthritis, paraplegia, or recent myocardial infarction. TAP can be utilized for burst-pacing in the treatment of SVT arrhythmias and in the differential diagnosis of complex arrhythmias. Our results indicate this procedure was tolerated

Table 1. ***Thallous chloride (thallium-201).***

Thallium-201 is a cyclotron produced nuclide with half-life of approximately 73 hours.

Limitations include: photons easily attenuated by body tissues (80 Kev Hg x-rays). Long physical and biological half-lives increase radiation dosimetry, limiting patient doses to 2 to 4 mCi. Imaging procedure involves a stress examination followed by a second examination after redistribution that can take from 4 to 72 hours.

Table 2. ***RP-30.***

Potential Clinical Advantages

- Superior isotope for imaging
- Compatible with planar/SPECT instrumentation
- Perfusion and function studies
- Readily available
- Flexible scheduling
- Opportunity to increase nuclear cardiology studies

Table 3. ***RP-30.***

Potential Clinical Applications

Perfusion

- Ischemia
- Infarction
- Planar
- Gated Planar
- SPECT

Function

- Gated wall motion
- First pass ejection fraction

Table 4. ***Limitations of pharmacologic coronary vasodilatation.***

Dipyridamole: Limitations

Oral preparation—slow onset of action, prolonged procedure.

Recommended intravenuous dose produces widely variable and frequently submaximal coronary vasodilation.

Side effects—chest discomfort, ST depression, arrhythmias, headaches, flushing, dizziness, lightheadedness, and gastrointestinal complaints.

Symptoms not easily managed by dose reduction relative long half-life.

Theophylline—a direct-acting adenosine antagonist often is required.

quite well without difficulty in patients with no history of esophageal disorders. The esophageal pacing electrode is swallowed in capsule form until proper electrode pacing capture can be documented by a P to QRS ratio of at least 1:1 or greater on the electrocardiogram. Once the proper position is maintained and documented via the ECG, pacing can be initiated using a pulse width of 10 milliamps and pulse width of 6 to 28 milliamps. The pacing system is set at 20 beats/min above the patient's baseline heart rate and incremented sequentially. All patients are paced to 85 percent of their age-predicted maximal heart rate, unless chest pain or ECG changes occur before 85 percent is reached. When the patient has reached the 85 percent age-predicted rate, thallium is injected. The patient is paced for an additional five minutes and imaging is performed. This test is very well tolerated and comparable in sensitivity to treadmill thallium imaging.

POSITRON EMISSION TOMOGRAPHY

Investigators reported PET identifies transient defects (ischemia) in 34 percent of myocardial segments showing a fixed defect (infarction) by SPECT. Because PET actually is the gold standard for assessing myocardial viability, the future of cardiac imaging may lie in PET. Pharmacologic stressing with dipyridamole/ruthenium-82 (^{82}Ru) PET as well as ammonia/fluorodioxide glucose (^{18}FDG), PET imaging may help to distinguish infarction from acutely "stunned" or chronically ischemic "hibernating" myocardium. However, this is an expensive technology. PET scanners range from $950,000 to $2.5 million. For rubidium dipyridamole stressing, a $20,000 generator is required every 25 days for rubidium production: for ammonia/^{18}FDG studies, a $2 million cyclotron is required. Myocardial metabolism also may be assessed with carbon-11 (^{11}C) acetate, ^{11}C palmitate, or fatty acid analogs such as IPPA that may provide an index of fatty acid metabolism (IPPA can be utilized with SPECT imaging). A new and exciting area of neurocardiology involves isotopes such as MIBG and ^{11}C hydroxyephedrine.

Table 5. ***Characteristics of adenosine.***

- Coronary vasodilator
- Rapid onset of action
- Short half-life—10 seconds
- Titrate to tolerance—max 140 mcg/kg/min
- Infusion—6 min—thallium at 3 min

Table 6. ***Adenosine mechanisms.***

- Interacts with A1 and A2 receptors
- Altered synthesis of cyclic amp
- Guanine nucleotide proteins involved as mediators
- Calcium ion movements are produced

Table 7. ***Purpose.***

Primary Objective

Determine degree of concordance between Adenoscan® and exercise thallium in patients with angiographically significant CAD.

Secondary Objectives

Determine the degree of sensitivity specificity and predictive accuracy of Adenoscan® and exercise thallium in detecting significant CAD as defined by cath.

To determine reliability of Adenoscan® and exercise thallium to predict location and severity of CAD.

CARDIAC FUNCTION

In the area of cardiac function, left-sided regurgitation was evaluated on first pass exercise angiography, and abnormal left and right ventricular function with exercise in symptomatic mitral valve prolapse. A followup of patients with chronic aortic regurgitation before and after valve replacement is in progress and we are testing cardiac function with radionuclide ventriculography after percutaneous aortic balloon valvuloplasty. We also are assessing the long-term effects of valve repair and replacement using radionuclide ventriculography.

Radionuclide ventriculography was performed pre- and postpercutaneous aortic balloon valvuloplasty (ABV) in 50 consecutive patients, with long-term followup to 18 months postvalvuloplasty. We determined that successful ABV is associated with significant reduction in the AV gradient; there was significant increase in the LVEF between the one and six-months' followup and a significant decrease in LVEDV and LVEDVI between the one and three-months followup demonstrated by radionuclide ventriculography. It was determined that aortic balloon valvuloplasty is associated with overall improvement in left ventricular function parameters at three and six months that were not apparent at the initial postvalvuloplasty study. Radionuclide ventriculography was found to be a useful tool in the followup of ABV patients.

The management of patients with chronic aortic regurgitation is best performed utilizing serial radionuclide ventriculograms. Patients with normal resting, left ventricular ejection fraction, normal exercise tolerance, and normal ejection fractions with exercise could be followed annually. However, patients with an abnormal ejection fraction response to exercise, should be followed at three- to six-month intervals. Patients with abnormal resting LVEFs and exercise intolerance or symptoms should undergo cardiac catheterization/valve replacement.

CONCLUSION

Future adoption of PET imaging as a clinical rather than a research tool probably will depend upon the development of small, relatively inexpensive cyclotrons, better annihilation photon detectors, more efficient automated systems for radiopharmaceutical incorporation of short-lived positron emittors, and regional PET centers. HCFA presently is considering the reimbursement issues that impact on myocardial viability studies with PET. In spite of these issues, nuclear medicine research continues to blossom. The National Institutes of Health budget for diagnostic imaging research in fiscal year 1988 totaled $866.6 million; nuclear medicine projects represented 43 percent of this total. Research with positron emitters and PET totaled $20.5 million, and research with radiolabeled monoclonal antibodies totalled $6.2 million.

Nuclear medicine plays a vital role in patient management. Diagnostic screening procedures in nuclear medicine influenced patient management in 63 percent of hospital inpatients, and in quantitative/monitoring studies, we influenced management in 56 percent of cases. The future of PET, radiopharmaceuticals, monoclonal antibody imaging, and mobile nuclear cardiology are promising. ■

REFERENCES

1. Wilson RF, Christensen B, Zimmer S, et al.: Effects of adenosine on the coronary circulation in humans. *J Am Coll Cardiol* 13:132, 1989.

2. Mahmarian JJ, Staudacher RS, Hixson JB, et al.: Thallium-201 scintigraphy after maximal pharmacological coronary vasodilation with adenosine. *J Nucl Med* 30:760, 1989.

3. Trakhtenbroit AD, Cheirif J, Kleiman NS, et al.: Intravenous adenosine echocardiography, a new pharmacologic stress test; preliminary results and comparison with simultaneous thallium scintigraphy. *J Am Coll Cardiol* 15:234A, 1990.

4. Cheirif J, Kleiman S, Verani MS, et al.: Intravenous adenosine echocardiography, a new pharmacologic stress test: Preliminary results and comparison with simultaneous thallium scintigraphy. *J Am Coll Cardiol* 234:15, 1990.

5. Siffring PA, Gupta NC, Mohiuddin SM, et al.: Myocardial uptake and clearance of T1-201 in healthy subjects: Comparison of adenosine-induced hyperemia and exercise stress. *Radiology* 173:769-774, 1989.

6. Staudacher RA, Mahmarian JJ, Hixson JB, et al.: Adenosine thallium-201 scintigraphy: Feasibility, safety, and initial results in man. *J Am Coll Cardiol* 13:161A, 1989.

7. Mahmarian JJ, Johnston DL, Verani MS: Assessment of coronary artery anatomy early after acute myocardial infarction with adenosine thallium-201 tomography. *Circulation* 80:II-308, 1989.

8. Mahmarian JJ, Johnston DL, Boyce TM, et al.: Detection of residual ischemia early after acute myocardial infarction using adenosine/thallium-201 single-photon emission computed tomography. *Circulation* 80:II-521, 1989.

9. Nguyen T, Heo J, Ogilby D, et al.: Adenosine-SPECT thallium-201 myocardial imaging. *J Am Coll Cardiol* 15:229A, 1990.

10. Mahmarian JJ, Johnston DL, Verani MS: Assessment of coronary artery anatomy early acute myocardial with adenosine thallium-201 tomography. *Circulation* 80:4, 1989.

11. Belvedere D, Goyna E, VandeScreek P, et al.: Inability of electrocardiographic changes and chest pain during infusion of adenosine to predict the presence of coronary disease. *J Am Coll Cardiol* 44A:15, 1990.

12. Panidis IP, McAllister M, Ross J, Mintz GS: Prevalence and severity of mitral regurgitation in the mitral valve prolapse syndrome: A doppler echocardiographic study of 80 patients. *J Am Coll Cardiol* 7:975-981, 1986.

13. Abdulmassih S, Iskandrian A, et al.: Principles and applications. *Nucl Cardiac Imaging* 6:425-466, 1989.

14. Johnson LL, Powers EF, Tzau WR, et al.: Left ventricular volume and ejection fraction responses to exercise in aortic regurgitation. *J Am Coll Cardiol* 51:1542, 1983.

15. Huxley RL, Gaffney FA, Corbett X Jr, et al.: Early detection of left ventricular dysfunction in chronic aortic regurgitation as assessed by contrast angiography, echocardiography, and rest and exercise scintigraphy. *J Am Coll Cardiol* 51:1542, 1983.

16. Lewis SM, Riba AL, Berger HJ, et al.: Radionuclide angiographic exercise left ventricular performance in chronic aortic regurgitation: Relationship to resting echocardiographic ventricular dimensions and systolic wall stress. *J Am Heart* 2:103-498, 1982.

17. Dehmer GJ, Firth BG, Hillis LD, et al.: Alterations in left ventricular volumes and ejection fraction at rest and during exercise in patients with aortic regurgitation. *J Am Coll Cardiol* 48:17, 1981.

18. Goldman ME, Packer M, Horowitz SF, et al.: Relation between exercise-induced changes in ejection fraction and systolic loading conditions at rest in aortic regurgitation. *J Am Coll Cardiol* 3:924, 1984.

19. Branzi A, Loli C, Piovaccari G, et al.: Echocardiographic evaluation of the response to after load stress test in young asymptomatic patients with chronic severe aortic regurgitation; sensitivity of the left ventricular end-systolic pressure-volume relationship. *Circulation* 70:561, 1984.

20. Borer JS, Rosing DR, Kent KM, et al.: Left ventricular function at rest and during exercise after aortic valve replacement in patients with aortic regurgitation. *J Am Coll Cardiol* 44-1297, 1979.

21. Safian RD, Berman AD, Diver DJ, et al.: Balloon aortic valvuloplasty in 170 consecutive patients. *J Med* 319:125-130, 1988.

22. Allen ML, Vacek JL, Preston DF, et al.: Thallium cardiac stressing by esophageal pacing. *J Nucl Med* 3:135-138, 1989.

23. McAfee JG, Kopecky RT, Frymoyer PA: Nuclear medicine comes of age: Its present and future roles in diagnosis. *Radiology* 174:609-620, 1990.

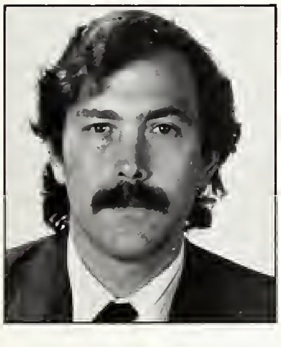
24. Tamaki N, Yonekura Y, Senda M, et al.: Value and limitation of stress thallium-201 single photon emission computed tomography: Comparison with nitrogen-13 ammonia positron tomography. *J Nucl Med* 29:1181-1188, 1988.

Vascular Surgery and Cardiac Pacing

DAVID E. EISENBUD, MD

Advances in vascular surgery and in the management of cardiac arrhythmias have benefitted thousands of patients in recent years. In New Jersey, one of several groups provides outstanding leadership in these important areas.

The vascular surgical group at Newark Beth Israel Medical Center (NBIMC) has had a longstanding commitment to the laboratory and clinical investigation of cardiac and peripheral vascular problems. The experimental laboratory, established by Dr. Victor Parsonnet in 1958, pursues various interests, including: cardiovascular devices (pacemakers, vascular grafts, and stents); cellular biology of vascular disease; noninvasive methods for detection and monitoring of vascular problems; and clinical reviews of relevant topics.



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INTRAVASCULAR STENTS

The growing worldwide interest in the field of intravascular stents stems from the emergence of endovascular interventions—percutaneous transluminal coronary angioplasty (PTCA) and peripheral angioplasty (PTA), laser angioplasty, and atherectomy. It is estimated that over 200,000 PTA and PTCA procedures will be performed in the United States this year. Though these procedures are appealing because they are minimally invasive, the failure rate within the first six months may be as high as 30 percent.

There are several mechanisms of early failure. Elastic recoil of the blood vessel wall can cause recurrent stenosis after the balloon is removed.

Alternatively, damage done to the arterial wall during dilatation may lead to dissection of the wall, with ultimate stenosis or closure of the vessel. Successful dilatation of atherosclerotic lesions requires rupturing the intima and at least part of the media; it is said that every successful dilatation necessarily involves sufficient local trauma to lead to arterial dissection. In fact, angiograms taken immediately after successful PTA or PTCA often demonstrate a definite local dissection.

To combat both elastic recoil and to secure possible intimal flaps against the media, several groups have investigated intravascular stents. The purpose of such devices would be to push the flap back in place and allow for proper healing, while preventing intramural dissection and restenosis from contraction of the smooth muscle in the vessel wall.

Our involvement in this area originated from an interest in dissection of a larger vessel, the aorta. Acute aortic dissection is an extremely lethal condition requiring major emergency surgery for survival. Untreated patients with aortic dissections have a 28 percent one-day mortality, and only 10 percent survive three months. In fact, many of these patients who present for emergency evaluation die in the emergency ward or angiography suite before surgery can be done. In 1985, a patient recovering from surgical repair of an acute aortic dissection designed a self-expanding polyester stent that could be introduced into the aorta from the femoral artery to expand and obliterate a dissection.

We also investigated other stent materials, as it was felt the strength of the polyester mesh might not be sufficient to prevent recoil of a strong arterial wall; and it would be more convenient to dilate the arterial lesion and insert the stent simultaneously. Fluoroscopic visualization also was difficult with the polyester stent; the mesh needed to have metal intertwined with it. Thus, we turned to stainless steel[2] and tantalum stents.

The current stent, made of tantalum,[3-4] is crimped onto a balloon angioplasty catheter, and is expanded by the balloon during dilatation. It is visualized easily using fluoroscopy, can be cut to any length to accommodate any lesion, and will acccommodate curves. A model of arterial disease was sought to test its usefulness after initial studies of biocompatibility and ease of insertion (similar to those done with the polyester stent) showed no problems with the metal stents (Figure 1).

At present, an application is pending with the Food and Drug Administration (FDA) for phase I clinical trials of the tantalum Medtronic-Wiktor stent for iliac arterial stenoses. Twenty patients appropriate for iliac dilatation will receive stents and then be re-evaluated at six months with clinical examination and angiography. Meanwhile, design modifications are in progress to create an introduction system that is small enough to fit into the femoral artery, yet will expand to the 3 to 5 cm size necessary to stent the thoracic aorta. Our hope is that such aortic stents will be available in emergency departments and angiography suites for the emergency nonsurgical treatment of acute aortic dissections within a few years.

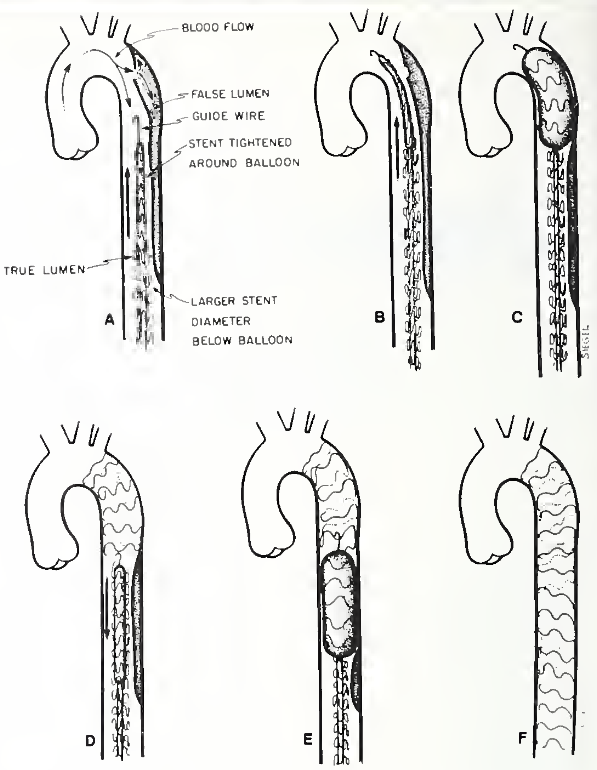
BLOOD FLOW
FALSE LUMEN
GUIDE WIRE
STENT TIGHTENED AROUND BALLOON
TRUE LUMEN
LARGER STENT DIAMETER BELOW BALLOON
A
B
C
D
E
F

Figure 1. Technique for obliteration of aortic dissection by stent placement. **A.** Stent on balloon catheter inserted retrograde along guidewire in true lumen. **B.** Proximal portion of stent on balloon catheter inserted just proximal to point of entry of false lumen as determined by angiogram. **C.** Point of entry closed and that portion of dissection obliterated by expansion of balloon and stent. **D.** Deflated balloon withdrawn into the next portion of nonexpanded stent. **E.** Next portion of stent expanded. **F.** Process is repeated until length of stent is completely expanded, thereby obliterating the dissection along its entire length.

Stents are of potential value in situations outside the arterial circulation. For example, venous stenoses at the distal anastomosis of arteriovenous dialysis grafts, are amenable to percutaneous dilatation, but often are prone to rapid restenosis. Stenting the venous opening may be a solution to this problem. We are working on a modification of our stent that will hold the urethra open but not cause stone formation. Other potential uses for stents include tracheal stenoses, bronchial anastomoses, and the nonsurgical creation of intrahepatic portacaval shunts to cure portal hypertension.

NEOINTIMAL HYPERPLASIA

Neointimal hyperplasia (NIH) is one of the most vexing problems in cardiovascular surgery and interventional radiology. The disease consists of an exuberant growth of smooth muscle cells and the deposition of interstitial substances. It first was noted to occur at the distal anastomosis of bypass grafts in coronary and peripheral circulation. More recently, it has been recognized as a universal phenomenon that occurs at varying times after arterial injury, laser treatment, balloon dilatation, and atherectomy. As such, it represents the leading cause of failure of properly performed surgical bypass or interventional techniques.

As the functions of the endothelial cell become elucidated, its importance in dynamically regulating the microenvironment becomes clear. We have been interested in the role of endothelial damage or absence in the creation of NIH, and the possible ability of functioning endothelium to prevent or lessen this disease.

We have been conducting experiments with "endothelial seeding" for several years. This process involves obtaining endothelial cells (from the canine external jugular vein) and applying them to a prosthetic surface. We culture the cells in order to increase their number and, thus, get better coverage of the prosthetic surface; this procedure takes weeks.

In the most recent investigation, arteriovenous loop grafts from the femoral artery to femoral vein were constructed using polytetrafluoroethylene (PTFE) grafts. Two grafts were inserted in each dog, one seeded with endothelial cells and the other bare. Grafts were followed with clinical examination and duplex scans until one side developed a venous anastomotic stenosis. This generally occurred at six to ten weeks. Grafts then were explanted, stenoses were measured, and graft surfaces studied for thrombus-free surface area, endothelial coverage, and ability to generate prostacycline (PGI-2). It should be emphasized that both the implanting surgeon and the technicians analyzing the explanted grafts were blinded to the allocation of grafts to receive seeding or nonseeding.

The results have proved quite exciting (Figure 2). Endothelial cell harvests were good (mean 3 x $10E^5$ cells) with excellent purity. Seeded grafts demonstrated 10 to 60 percent coverage with cells in contrast to unseeded grafts, which had no endothelial cells seen using scanning electron microscopy. The seeded grafts tended to have more thrombus-free surface area (76 percent seeded versus 63 percent unseeded; $P = 0.12$). Venous anastomotic stenoses were significantly greater in unseeded grafts (23 percent versus 58 percent stenosis, seeded versus unseeded; $P < 0.04$). Finally, only one unseeded graft had any surface production of prostacycline, while six of seven seeded grafts had appreciable PGI-2 production (6.76 ng/50 cc at 30 minutes seeded versus 2.92 unseeded; $P = 0.024$).

These promising results are the first indication that NIH may be inhibited by the application of endothelial cells to the surface of the implanted prosthesis at the time of surgery. Further studies will

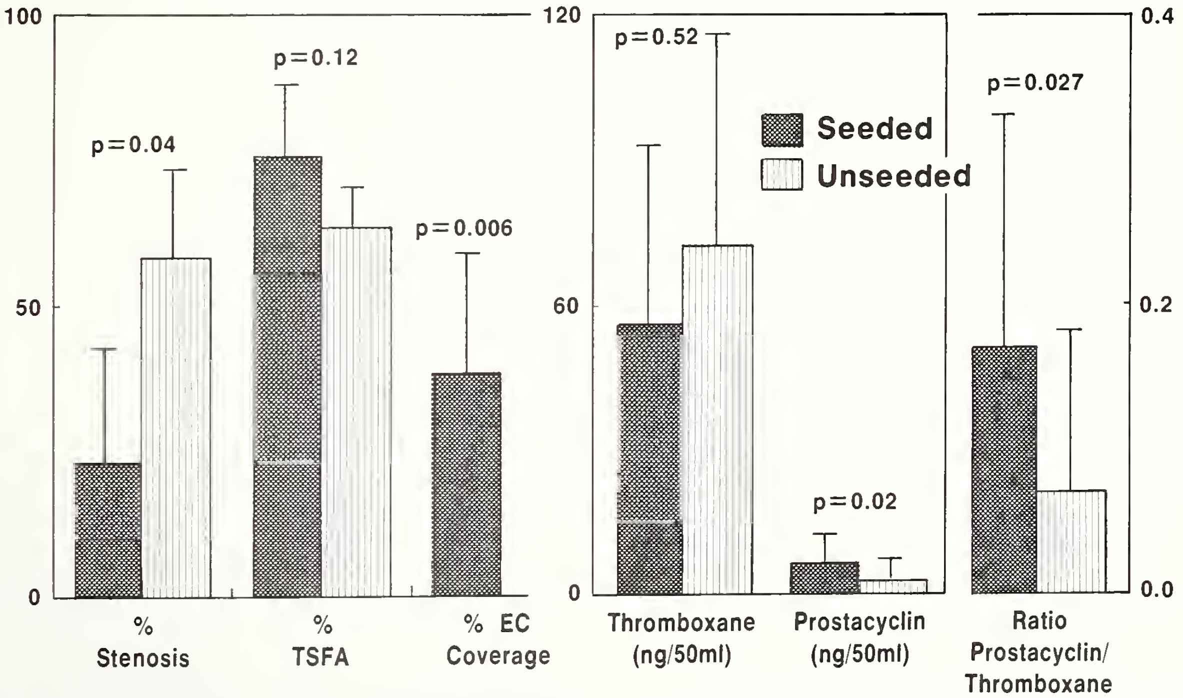

Figure 2. Effects of endothelial cell seeding on polytetrafluoroethylene arteriovenous grafts: percent stenosis at the distal anastomosis, thrombus-free surface area (TFSA), percent endothelial coverage, thromboxane production on the midgraft, prostacyclin production on the midgraft, and the ratio of prostacyclin to thromboxane production on the midgraft.

be required to elucidate the mechanisms that mediate this effect, though the increased prostacycline on the surface of seeded grafts suggests that the antiaggregatory effect of PGI-2 on platelets is at work. Endothelial seeding as conducted in our laboratory is logistically possible for human use; after a vein is removed, endothelial cells can be harvested and applied to a graft surface in the 30 to 60 minutes it takes to dissect the proximal and distal vessels for the bypass.

CARDIAC PACING

Physicians from Newark Beth Israel Medical Center have been active in developing and refining pacemaker technology for the past 30 years. Though many of the scientific and technical aspects of this mature field have been settled, certain issues remain.[6] The proliferation of increasingly more complex pacemakers with multiple programming modes, both atrial and ventricular leads, and the ability to sense and provide for periods of increased requirement for cardiac output have created controversy regarding indications for pacing and selection of the appropriate device in each circumstance.[7] We currently are evaluating a computer program that weighs 24 items of demographic and physiologic data for each patient and then recommends the most appropriate pacer mode for that person. In addition, it lists the most cost-effective devices available for implantation in that mode. Another problem with the more complex pacemakers is increased energy utilization, requiring larger power sources and resulting in lower pacer lifetime. This effect is more significant given the longer life expectancy for patients who require pacemakers compared to 20 years ago. Thus, many patients live long enough to require reoperation for pacemaker battery change. A major thrust of our pacer research at Newark Beth Israel Medical Center continues to focus on developing smaller electrodes with lower stimulation thresholds to conserve battery capacity.

In addition, we have developed a transesophageal left atrial pacemaker that functions through a nasogastric tube and, thus, can be inserted rapidly and safely for the control of sinus bradycardia and atrial flutter.[8] This may be appropriate in patients after open heart surgery and for patients in the emergency ward.

CLINICAL REVIEWS

With the development of a vascular registry, we have analyzed our clinical experience. Data regarding history, physical examination, angiogram, noninvasive testing, and surgery are entered into the computer; followup data records are completed in the physicians' offices. A full-time statistician enters and analyzes the data. These clinical investigations include use of the femoral-femoral crossover graft; use of thrombolytic therapy for arterial and graft occlusions;[11] and how to deal with significant carotid disease in patients requiring coronary bypass.

CONCLUSION

The Newark Beth Israel Medical Center vascular and cardiac surgical group considers basic research and the thoughtful analysis of clinical experience to go hand-in-hand with everyday patient care. Through such an integrated approach to the science of medicine many important advances have been made that impact on patient care. ■

REFERENCES

1. Eisenbud D, Parsonnet V, Wiktor D, et al.: A polyester intravascular stent for maintaining luminal patency. *Texas Heart Inst J* 15:12-16, 1988.

2. Trent MS, Parsonnet V, Shoenfeld R, et al: A balloon-expandable intravascular stent for obliterating experimental aortic dissection. *J Vasc Surg* 11:707-717, 1990.

3. Cross FL, Parsonnet V, Chokshi S, et al.: In vivo evaluation of a new, flexible, balloon-expandable tantalum stent in canines. Presented at the International Congress III, Lasers, Stents and Interventions in Vascular Disease, Scottsdale, Arizona, November 1989.

4. Chokshi S, Hogan J, Desai V, et al.: Intravascular ultrasound assessment of implanted endovascular stents. Presented at the International Congress III, Lasers, Stents and Interventions in Vascular Disease, Scottsdale, Arizona, November 1989.

5. Lopyan KS, Eisenbud DE, Brener BJ: Does endothelial seeding inhibit neointimal hyperplasia in arteriovenous grafts? Presented at the 6th Annual Vascular Fellows Abstract Presentation, New York, New York, April 1990.

6. Parsonnet V, Bernstein AD: Transvenous pacing: A seminal transition from the research laboratory. *Ann Thorac Surg* 48:738-740, 1989.

7. Parsonnet V, Bernstein AD: Pacing in perspective: Concepts and controversies. *Circulation* 73:1087-1093, 1986.

8. Parsonnet V, Harari D, Gallagher R, et al.: Transesophageal left atrial pacing and sensing using a combination bipolar electrode/nasogastric tube in post open heart patients. *Pace* 12:668, 1989.

9. Brener BJ, Eisenbud DE, Brief DK, et al.: Utility of femorofemoral crossover grafts, in Bergan JJ, Yao JST (eds), *Aortic Surgery*. Philadelphia, PA, W.B. Saunders Company, 1989, 423-438.

10. Brener BJ, Cross F, Brief DK, et al.: Comparison of aortofemoral and femorofemoral bypass for iliac artery occlusive disease, in Veith FJ (ed), *Current Critical Problems in Vascular Surgery*. St Louis, MO, Quality Medical Publishing, Inc., 1990.

11. Eisenbud DE, Brener BJ, Shoenfeld R, et al.: Treatment of acute vascular occlusions with intra-arterial urokinase. Presented at the Society for Clinical Vascular Surgery, Palm Springs, CA, March 1990.

12. Brener BJ, Brief DK, Alpert J, et al.: The risk of stroke in patients with asymptomatic carotid stenosis undergoing cardiac surgery: A followup study. *J Vasc Surg* 5:269-279, 1987.

New Jersey Pediatric Hematology Oncology

MILTON H. DONALDSON, MD

Less than three decades ago, adequate facilities and trained medical and support personnel to treat pediatric cancer were not available in New Jersey. Seven hospitals have the expertise and multidisciplinary teams that collaborate through the New Jersey Pediatric Hematology Oncology Network.

The first cooperative cancer study groups were established in the early 1950s. Initially, most of these groups consisted of institutions from relatively restricted geographic distributions, but soon the groups evolved with national and even international activities.

The Pediatric Oncology Group (POG) and the Childrens Cancer Study Group (CCSG) are the only national study groups that conduct research in treatment and biology of childhood cancer. Each group develops study protocols to investigate various aspects of childhood cancer, e.g. epidemiology, etiology, pathology, surgery, radiation therapy, chemotherapy, and supportive care. This enables investigators in member institutions to treat the children in a uniform manner, providing strictly comparable data. Large volumes of data can be collected and analyzed in a much shorter time than would be possible by any other mechanism. This method of generating, combining, and analyzing comparable data from numerous institutions simultaneously expands the knowledge of cancer and improves treatment more rapidly than ever would have been possible otherwise. When the incidence of a tumor is too low for a single group study, efforts and resources are combined into an intergroup study to obtain statistically significant data.

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Subsequently, a philosophy evolved to develop geographically distributed centers to which cancer patients would be referred for virtually all treatment. There seemed to be a tacit implication that competent and effective treatment of such diseases was not possible by the patient's community medical personnel and facilities. And, in many locales, such was the case because of too few physicians and nurses adequately trained in chemotherapy and the lack of modern radiation facilities. However, during the 1960s and 1970s, National Cancer Institute funding enhanced training programs that generated a rapid increase in oncologic specialists in virtually every discipline. As a result, there is a cadre of physicians, nurses, oncologic specialists, and technical facilities capable of providing high-quality, coordinated cancer care in many communities. In some such programs, affiliation with a cooperative cancer

Table. ***New Jersey Pediatric Hematology Oncology Network***

Institution/Location	Director/Phone	Group Affiliation*
Valerie Fund Children's Center Children's Hospital of New Jersey United Hospitals, Newark	Richard Sills, MD 201/268-8686	CCSG
Valerie Fund Children's Center Cooper Hospital/University Medical Center Camden	Milton Donaldson, MD 609/342-2264	CCSG
Tomorrows Children's Institute Hackensack Medical Center Hackensack	Michael Harris, MD 201/441-3231	POG
Valerie Fund Children's Center Monmouth Medical Center Long Branch	Carol Lehan, MD 201/870-5106	POG
Valerie Fund Children's Center Newark Beth Israel Medical Center Newark	Peri Kamalakar, MD 201/926-7161	CCSG
Valerie Fund Children's Center Overlook Hospital Summit	Steven Halpern, MD 201/522-2353	CCSG
Valerie Fund Children's Center Robert Wood Johnson University Hospital New Brunswick	Lawrence Ettinger, MD 201/937-7898	CCSG

*CCSG = Childrens Cancer Study Group; POG = Pediatric Oncology Group

study group has provided ready access to current comparative treatment (phase III) trials. Some community institutions also are approved to conduct (phase II) studies of drugs in early human application. (Generally, trials of drugs in earliest human usage, [i.e., phase I studies to determine mechanism of actions, toxicities, and tolerable dosage levels], are carried out in designated comprehensive and medical school cancer centers rather than in community-based programs.) Participation in the cooperative group studies not only allows the oncology professionals to contribute to critical and essential research, but it also provides state-of-the-art therapy to these patients.

PEDIATRIC CANCER CENTERS

This year, in the United States, there are approximately 1,040,000 new cases of cancer.[1] Of these, approximately 8,000 cases occur in the first two decades of life, the majority of which will come into a pediatric oncology program for treatment. Since so few pediatric cancers occur, it is understandable that to economically maintain appropriate facilities and professionals with competence and experience in the treatment of these diseases, the patients need to be concentrated in the relatively few cancer centers with the expertise and commitment to treat children. These cancer centers should be directed by physicians board certified in pediatric hematology oncology and working with a coordinated, multidisciplinary treatment team that must include nurses and social workers trained and dedicated to oncology. The center should be affiliated with one of the two national pediatric cooperative cancer study groups.

Also vital to the child's treatment are the disciplines of diagnostic imaging, pathology, and radiation oncology. Depending on the type and location of the malignant disease affecting the patient, the team may expand to include general surgery, neurosurgery, orthopedics, urology, ophthalmology, rehabilitation medicine, and critical care. Each of the physicians in these fields should have special training and competence in management of the pediatric patient.

Specially trained educators should establish the patient's baseline levels as soon as possible after the cancer diagnosis is established.[2] Periodically thereafter—perhaps annually for children who start treatment under ten years of age—retesting should be performed. Continuing surveillance in cooperation with school systems detects learning disabilities early in their development. Retesting and subsequent establishment of tutoring, or whatever special educational aid is necessary, will help the child to best overcome the adverse impact of cancer treatment on the child's ability to gain the most from the education system. The increasing number of children who are cured of cancer, thus, will be enabled to be fully educated, economically productive adults. Current therapy is curing approximately 60 to 65 percent of children under 15 years of age.[3] In 1990, it has been estimated that 1 of every 1,000 persons who have attained the age of 20 years will be a survivor of cancer.[4] If one assumes that the median age at the time of diagnosis is ten years, that should result in a very conservative estimate of over 200,000, and possibly over 300,000, person-years of contributions to society by each patient cured. The justification for having an educator as part of the treatment team becomes clear.

A relatively new profession that should be integrally involved with overall management of the child with cancer is that of the child life specialist (CLS), formerly known as "the play therapist." The CLS often is able to ferret out inaccurate thoughts and perceptions leading to fears and anxieties in the patient, creating a lack of cooperation or overt resistance to diagnostic and/or treatment procedures. This usually enables the child to tolerate the treatment experience much better and, in turn, will allow the patient's family to experience less anxiety and grief.

The nurse(s) in a pediatric hematology oncology program should be specially trained. Knowledge of the diseases is strongly supplemented by supervised experience and training in administration of blood products as well as the pharmacology and administration of cancer chemotherapeutic agents. Understanding of clinical research study protocols is essential for production of useful data to be provided to the cooperative groups and local research projects. In some institutions, data management is one of the nurse's responsibilities, but others maintain a separate data manager to avoid disruption of the nurse's role in patient care activities.

Parents usually are profoundly distressed by the development of cancer in their child. It is essential that the treatment team include an experienced pediatric psychosocial support person knowledgeable about these diseases. More often than not, this individual is a professional social worker but may be a clinical psychologist. In addition to emotional and psychological support, the family often requires aid in managing insurance and other financial impacts of this totally unfamiliar medical condition, transportation to the treatment center, coping with sibling reactions to the patient's illness, assistance with responding to informed consent requirements of research protocols, marital or single parent stress, and bereavement if the child dies.

The commitment and contribution of each discipline is essential. At the very least, the nursing and social work members of the team must be full-time with the program, though the CLS and educator colleagues may be assigned part-time by other divisions or departments of the institution.

THE EFFECT OF CANCER ON FAMILIES

The impact on a family is profound regardless of the member afflicted by cancer.[5] However, when the patient is a child, the family is even more disrupted. An adult must bring the child to the center for treatment. If the child is hospitalized, usually one parent stays with the youngster. This places virtually all the homemaker tasks and responsibilities on the other parent. If there are other children, it is common that relatives, neighbors, or community agencies are recruited to help manage the household operations in order for one parent to continue to be employed to pay the expenses. In today's society, it is common that both parents are employed outside the home in order to meet family financial commitments. The child's illness may make it necessary for one parent to give up that job to fulfill the treatment program schedule. This is particularly true if complications develop, as commonly occur early in therapy. The social worker is essential to help the family to identify and utilize community resources, as well as provide counseling expertise to help relieve the emotional stress for all members of the family.

THE NEW JERSEY PEDIATRIC HEMATOLOGY ONCOLOGY NETWORK

It is common that the family must travel long distances to obtain expert, multidisciplinary care for their child with cancer. The cancer center often is in a large city with all attendant inconveniences, resulting in even greater stress, expense, and other problems being added to the situation.

Until only a few years ago, such was always the case for New Jersey families. However, since the early 1970s seven pediatric hematology oncology programs have developed throughout the state (Table). Although programmatically organized in various ways, each possesses multidisciplinary capability to treat childhood cancer comprehensively. Each institution is affiliated with one of the two pediatric cooperative cancer groups that study and treat all types and aspects of childhood cancer. Institutional membership in either of these two organizations provides the most up-to-date treatment and research programs available. This precludes the patient and family having to travel out of New Jersey to avail themselves of state-of-the-art therapy.

Although the large national groups have the advantage of being able to accomplish relatively short-term studies with statistically significant outcomes, there are disadvantages. A smaller organization with fewer institutions and investigators, located in a smaller geographic area, expedites therapy and facilitates easier quality control of data through simpler communications and more frequent meetings with greater ease at a lower expense. Therefore, such a group can perform "pilot" clinical studies that may provide data to base definitive national group studies. Furthermore, meetings provide a forum for didactic presentations from which continuing education credits can be derived. Such has been the direction of the development of the New Jersey Pediatric Hematology Oncology Network (Table), composed of the physicians and nurses of the seven programs throughout the state; the Network was formally organized in 1987.

It is noteworthy that the Network was the recipient of the first grant for support of a clinical study from the New Jersey Commission on Cancer Research. The study was to evaluate the interrelationships of immunophenotyping, gene rearrangement, and cytogenetics with clinical outcome of children who were newly diagnosed with acute lymphoblastic leukemia and currently is in followup. More recently, another grant has been obtained this year by Michael Greenberg, PhD, of Rutgers University, with the author, to review pediatric cancer diagnosis in the state for the period 1979 to 1988. This effort is expected to develop an accurate set of incidence data from which it will be possible to promulgate prospective and retrospective epidemiological studies.

One of the purposes of the Network is to serve as a source of support and expert knowledge to aid the New Jersey State Department of Health (NJDOH), the New Jersey Chapter of the American Academy of Pediatrics, the Medical Society of New Jersey, the American Cancer Society, the Leukemia Society of America, and other organizations in matters related to hematologic and oncologic diseases in children. For example, the Network provided a pool of experts to guide and aid NJDOH in the development of the recently initiated statewide neonatal hemoglobinopathy screening program. Subsequently, five of the institutions have been designated as regional treatment centers for confirmation of the initial screening diagnosis, education of parents about the diseases, and to provide comprehensive treatment, especially of sickle cell disease.

Obviously, such a multidisciplinary group is expensive. It is not possible to underwrite the costs of such an operation from patient fees income alone. Therefore, each of the seven programs is dependent on charitable fundraising to supplement the base of funding received from the parent institution and patient revenues. The three programs that constitute the CCSG-University of Medicine and Dentistry program (Children's Hospital of New Jersey, Robert Wood Johnson University Hospital, and Cooper Hospital/University Medical Center) receive a modest grant from the National Cancer Institute for protocol data management.

Hackensack Medical Center functions as part of the Cancer Control Oncology Program, that provides some financial support. The Hackensack program, Tomorrows Children's Institute, primarily is supported by the fundraising of a nonprofit organization, Tomorrows Children's Fund.

Clinical aspects of the other six programs are referred to as the Valerie Fund Children's Centers for Cancer and Blood Disorders. They are partially supported by the Valerie Fund, the oldest philanthropic organization in New Jersey dedicated to the financial support of treatment programs for children with cancer close to their home environments. It began with an alliance with Overlook Hospital in 1976 and now is approaching three quarters of a million dollars provided annually to the group of centers.

The Cooper Hospital/University Medical Center program also has been able to initiate development of a research laboratory with flow cytometry and cytogenetics based on major contributions from three separate nonprofit charities (Eagles Fly for Leukemia, House of Kids, and the Canuso Foundation) located in the Delaware Valley.

Without the largess of individuals and businesses that contribute to these charitable organizations, the citizens of New Jersey would find it necessary to travel out of the state to avail themselves of expert professionals to administer competent, state-of-the-art care to their children who develop cancer. ■

REFERENCES

1. *Cancer Facts and Figures—1990.* American Cancer Society publication.

2. Deasy-Spinetta P, Spinetta JJ: Educational issues for children with cancer, in Pizzo PA, Poplack DG (eds): *Principles and Practice of Pediatric Oncology.* Philadelphia, PA, JP Lippincott Co., 1989, pp. 1027-1035.

3. Young JL, Ries LG, Silverberg E, et al.: Cancer incidence, survival, and mortality for children younger than 15 years. *Cancer* 58:598-602, 1986.

4. Meadows AT, Krejmas NL, Belasco JB: The medical cost of cure: Sequelae in survivors of childhood cancer, in VanEys J, Sullivan MP (eds): *Status of the Curability of Childhood Cancers.* New York, NY, Raven Press, 1980, pp. 263-276.

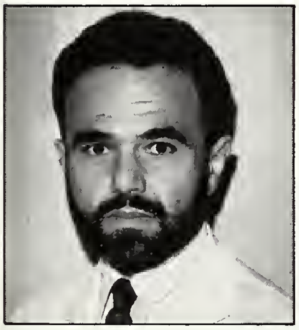
5. Pizzo PA, Poplack DG (eds): *Principles and Practice of Pediatric Oncology.* Philadelphia, PA, JP Lippincott Co., 1989, chapters 41-43.

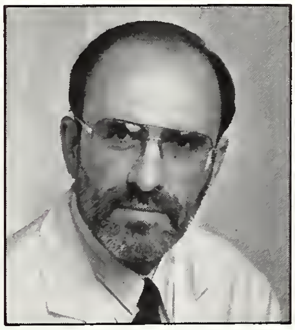
Surfactant Replacement Therapy

JEFFREY R. GREENWALD, MD
I. MARK HIATT, MD
THOMAS HEGYI, MD

The field of neonatology has experienced exceptional growth in recent years, and several excellent facilities exist in New Jersey for the care of premature and sick newborn infants. This article describes important advances made in the management of neonatal respiratory distress syndrome.

Avery and Mead presented evidence that infants dying with hyaline membrane disease (HMD) were deficient in a material responsible for lowering surface tension in the air passages of the lung.[1] The existence of this surface active material or surfactant was reported by Pattle and Clements in the early 1950s and its role in maintaining lung volume at end-expiration was demonstrated in the normal lung.[2] Since this discovery, physicians caring for premature infants have envisioned treating respiratory distress syndrome (RDS) with surfactant replacement therapy.





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The incidence of RDS varies inversely with advancing gestational age, occurring in approximately 20 percent of infants born before 36 weeks' gestation and in approximately 70 percent of infants born before 30 weeks' gestation.[3] The total number of cases of RDS in the United States is estimated to be between 50,000 and 100,000 each year, with a 10 percent mortality. The morbidity from RDS is much more extensive due to complications of therapy and the impact of prematurity. Current therapy for moderate to severe RDS includes high oxygen concentrations and mechanical ventilation that cause short-term complications such as pulmonary interstitial emphysema (PIE) and pneumothorax (PTX), as well as long-term complications like bronchopulmonary dysplasia (BPD). Other nonrespiratory

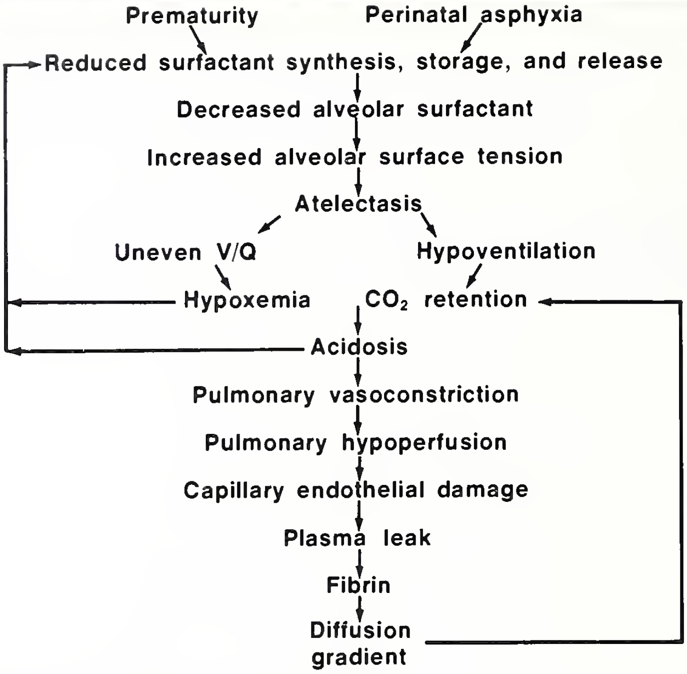
Prematurity
Perinatal asphyxia
Reduced surfactant synthesis, storage, and release
Decreased alveolar surfactant
Increased alveolar surface tension
Atelectasis
Uneven V/Q
Hypoventilation
Hypoxemia
CO₂ retention
Acidosis
Pulmonary vasoconstriction
Pulmonary hypoperfusion
Capillary endothelial damage
Plasma leak
Fibrin
Diffusion gradient

Figure 1. Pathogenesis of RDS.

complications include patent ductus arteriosus (PDA), necrotizing enterocolitis (NEC), and intraventricular hemorrhage (IVH). The goal of new therapy for RDS would be to reduce mortality and to reduce the morbidity in the survivors.

WHAT IS RDS?

The pathology of RDS is characterized by diffuse atelectasis and the formation of a membrane that lines the visible air spaces. This membrane consists of a fibrinous matrix of materials derived from the blood and contains cellular debris derived from injured epithelium. Clinically, the infant with RDS will manifest symptoms either immediately after birth or within two or three hours of age. These symptoms include tachypnea and/or dyspnea manifested by the use of the accessory muscles of breathing, as well as expiratory grunting and flaring of the alae nasi. Eventual respiratory fatigue leads to respiratory failure requiring mechanical ventilation. Hypoxemia usually is present from the onset requiring supplemental oxygen. Radiographic abnormalities include underinflation, symmetrical haziness, and atelectasis. The "ground glass" appearance, the radiographic expression of such atelectasis, is characterized by fine reticulogranular opacities with prominent air bronchograms. The most severe form of RDS will reveal a generalized "white out" of the lung fields.[3]

Pulmonary function is abnormal with decreased functional residual capacity (FRC) and decreased lung compliance. There also is increased dead space leading overall to a low effective tidal volume. The pathophysiology of these clinical manifestations begins with prematurity and its associated deficiency of surfactant. Figure 1 reveals the chain of events beginning with an increase in alveolar surface tension owing to decreased alveolar surfactant. In turn, this leads to diffuse atelectasis and results in hypoxemia, hypercapnia, and acidosis. A second phase of RDS then ensues with pulmonary vasoconstriction and hypoperfusion as well as capillary endothelial damage and plasma leak leading to pulmonary edema. This results in an increased diffusion gradient that will worsen the ventilation parameters. The time course of this schema generally is about 48 to 72 hours and during this time the infant is extremely ill and requires extensive support. After about 72 hours of age, recovery may start to be evident with regeneration of alveolar type II cells and an increase in surfactant synthesis.[3]

WHAT IS SURFACTANT?

Surfactant is a generic term for any material found in the lung with properties to lower surface tension at the air-water interface such as is seen in the alveoli.[4] In the human, surfactant is manufactured by the type II pneumocytes between 24 and 28 weeks' gestation. This process occurs at the same time as alveolarization of the distal saccules in the fetal lungs, providing the structure for respiration to occur. A third fetal respiratory development that occurs at this gestation is the production of the alveoli-capillary unit owing to the proximity of the pulmonary capillary bed to the potential air spaces and alveolar lining cells. This forms the anatomic basis for respiratory function and is vital for extrauterine air exchange. The three processes have completely matured in the term fetus; therefore, between 24 weeks and term, respiratory support often is needed.

Surfactant, as determined by animal and human lung washings, contains a complex association of phospholipids, proteins, and carbohydrates. The major phospholipid that has been found in lung washings is dipalmitylphosphatidylcholine (DPPC). DPPC has very strong surface tension lowering properties and comprises about 50 percent of the surfactant complex. Other phospholipids include phosphatidylinositol, phosphatidylethanolamine, and phosphatidylglycerol (PG). In all, phospholipids make up about 80 percent of the surfactant complex. Another 10 percent of the complex is made up of neutral lipids, such as cholesterol and the remaining 10 percent is made up of protein. It is interesting to note that lung washings do not contain carbohydrates despite the fact that Scarpelli demonstrated they are integral components of the surfactant system in situ.[5]

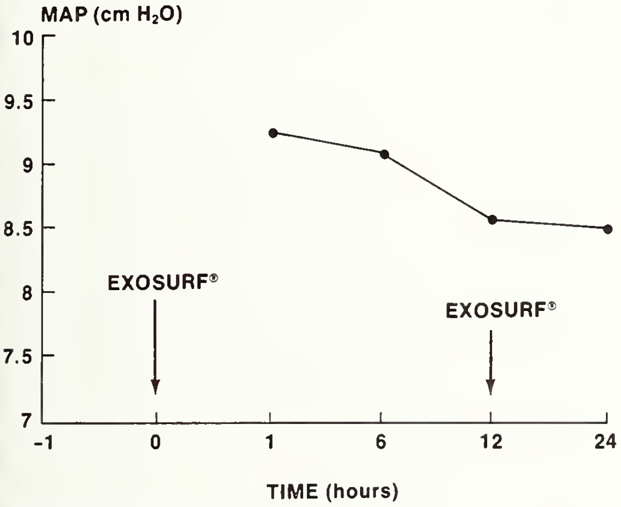

Figure 2. Exogenous surfactant administration: MAP responses.

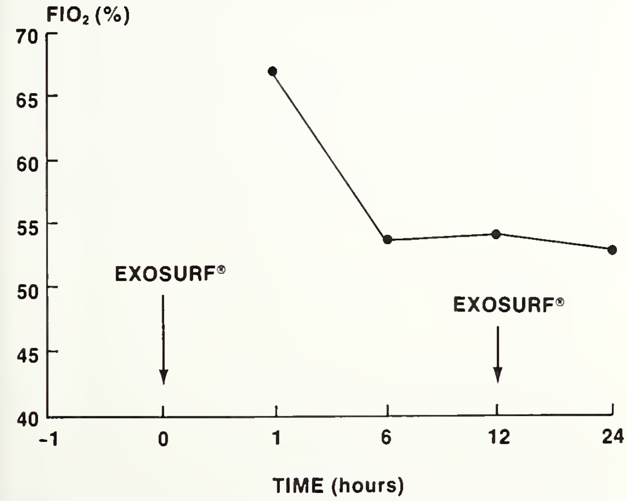

Figure 3. Exogenous surfactant administration: FIO_2 responses.

There are three specific proteins identified in the surfactant complex along with albumin and globulin. SP-A is a high molecular weight protein that binds rapidly to phospholipids and, in the presence of calcium, forms large lipid-protein aggregates. This is the so-called "tubular myelin" that is the three-dimensional structure of surfactant. SP-B and SP-C are low molecular weight proteins and are extremely hydrophobic. These substances are more appropriately classified as proteolipids because of their rapid association with lipids in the surfactant complex. All three proteins are vital for full surfactant activity. They are important in maintaining the three-dimensional structure and they are involved in spreading and re-uptake properties.[6]

The surface tension lowering properties of surfactant can be demonstrated in vitro on a Wilhelmy balance.[7] This change in surface tension is analogous to a force that counteracts the pressure exerted on the alveoli to collapse during expiration. The elastic properties of the lung provide this collapsing pressure and usually there is a force provided by chest wall tension that counteracts this pressure leading to a functional residual capacity (FRC). In the premature infant, however, the chest wall's compliance leads to chest wall collapse and a reduction in FRC. The patency of the alveolus is further compromised, owing to LaPlace's law of collapsing spheres: $P = kT/r$. P is the collapsing pressure and it is directly proportional to T, the surface tension and indirectly proportional to r, the radius of the sphere. If the surface tension was equal in all the alveoli (potential sphere), then the smaller alveoli would experience the most collapsing pressure. However, the presence of surface active material reduces surface tension and maintains alveolar stability on expiration.

DPPC alone significantly will lower surface tension in vitro, but not as much as pure surfactant. In vivo, surfactant influences respiratory function; it improves lung compliance and decreases the work of breathing. Pulmonary function measurements have demonstrated that RDS is a disease of low compliance, with anatomical correlates of severe atelectasis and pulmonary edema. Treatment with surfactant ameliorates these problems by increasing alveolar stability. Surfactant therapy also provides a more uniform alveolar recruitment on inspiration and decreases the driving force leading to pulmonary edema.[7]

The biophysical properties necessary for an exogenous surfactant are empirical and include the ability to lower surface tension on dynamic compression; the ability to respread after dynamic compression past monolayer collapse; the ability to absorb well from subphase to interface; and the ability to vary surface tension during dynamic compression-expansion.[7] These properties provide the basis for in vivo dynamic function and are vital for any form of surfactant replacement therapy.

SURFACTANT REPLACEMENT THERAPY

The first experiments with surfactant replacement were conducted in the 1960s using the most simple form of surfactant. Chu and Robillard used aerosolized DPPC instilled by nebulization into the lungs of premature infants. These efforts were unsuccessful in treating RDS and, in fact, these failures stalled the research for almost a decade. In the early 1970s, however, Enhorning and Robertson demonstrated improvement in pulmonary mechanics with the use of whole surfactant complex replacement therapy in premature rabbits. Thereafter, multiple animal studies confirmed their results that set the stage for further use in human infants.[2,7,8]

The whole surfactant complex obtained by centrifugation of animal (mainly bovine) lung washings contained a moderate amount of heterogenous proteins (10 percent). Clinicians feared that this amount of foreign protein when instilled into the infant could produce a potential immunologic reaction. Extraction strategies were developed and Fujiwara was successful in retaining most of the phospholipid with only 1 to 2 percent of the protein. In 1980, Fujiwara used lipid extract of bovine lung combined with DPPC and PG. This mixture was successful in improving blood gases, lowering mean airway pressures, and lowering inspiratory O_2 concentrations within hours of treatment in ten infants suffering from RDS.[8] This mixture was administered as a saline suspension via the endotracheal tube in a preparation consisting of 100 to 150 mg of lipid per kg and it became the basis of the commercially produced surfactant TA that presently is being distributed by Abbott laboratories as Survanta® in a research IND protocol.

Other types of surfactants also have been tried and have met with success. In 1983, Hallman avoided foreign proteins altogether by using human surfactant obtained from pooled amniotic fluid. Theoretically, human surfactant should be the best; however, it is very difficult to mass produce this product on a commercial basis. Many samples of amniotic fluid are required to obtain enough pure surfactant for one infant. Another strategy to avoid foreign proteins has led to the use of completely artificial surfactant. Bangham and Morley produced a mixture of 70 percent DPPC and 30 percent PG, calling it artificial lung expanding compound (ALEC). Research still is being carried out with this mixture, but it may yield the same results as pure DPPC, since it is felt that the protein plays an important function.[2,7,8]

The most recent development has been the production of another artificial compound called Exosurf®, presently being distributed by Burroughs-Wellcome in a research IND protocol. This compound was developed by Clements in San Francisco and contains a mixture of DPPC and two alcohols. These additives, tyloxapol and hexadecanol, are spreading agents or emulsifiers that have been shown to improve the activity of the synthetic mixture.[2]

The mid-1980s have been the era of randomized clinical trials with the different types of surfactants. The results of several studies are presented in Table 1. There are two basic types of studies on the effect of surfactant. The first type uses surfactant in a prophylactic or preventive mode, attempting to give surfactant as soon as possible after delivery. The second type is the rescue mode, treating only those infants who have severe RDS requiring intubation and high oxygen concentrations. Early preventive treatment is a compelling option, but many infants are treated unnecessarily in this approach.

THE PRESENT THERAPY

At St. Peter's Medical Center, New Brunswick, we began using Exosurf® for therapy of RDS in September 1989. The protocol has very strict enrollment criteria; some infants with RDS do not qualify for treatment. The rescue therapy protocol that we have adopted is such that the patient population needs to fit the following criteria: a) birth weight greater than 700 grams; b) 2 to 24 hours of age at first dosage; c) diagnosis of RDS (surfactant deficiency)—clinical criteria, radiologic criteria, or biochemical criteria (fetal lung maturity screen); d) intubated and on mechanical ventilation; e) arterial/Alveolar (a/A) oxygen tension ratio less than 0.22; f) parental/guardian informed consent obtained prior to treatment; and g) exclusions: proven fetal pulmonary maturity and congenital anomalies. This protocol has been approved by the investigational review board of St. Peter's Medical Center and all infants who met the above criteria were entered into the study.

The medication is supplied as a lyophilized powder reconstituted with sterile water making a homogenous suspension. A dosage of 5 cc/kg is administered via a special endotracheal tube adapter. During this time the infant remains on the ventilator and is continuously monitored by both pulse oxi-

Table 1. ***Placebo-matched controlled studies.***

Date	Reference	Surfactant	Mode	Results
1985	Enhorning	BLSE	Prophylactic	Improvement
	Shapiro	CLSE	Prophylactic	Moderate
	Kwong	CLSE	Prophylactic	Improvement
	Wilkinson	DPPC/PG	Prophylactic	Negligible
	Hallman	Human	Rescue	Improvement
1986	Merritt	Human	Prophylactic	Improvement
1987	Gitlin	Surf. TA	Rescue	Improvement
	Fujiwara	Surf. TA	Rescue	Improvement
	Morley	DPPC/PG	Prophylactic	Mild
1988	Lucey	Surf. TA	Rescue	Reduced Severity
1989	Burroughs-Wellcome*	Exosurf®	Rescue	Reduced Severity
	Burroughs-Wellcome*	Exosurf®	Prophylactic	Reduced Severity

BLSE—bovine lung surfactant extract
Surf. TA—surfactant TA
*Unpublished studies
CLSE—calf lung surfactant extract
Human—amniotic fluid extract

Table 2. ***Study results.***

Demographics (n = 28)
Birth weight (grams +/- standard deviation)
1247 +/- 457
(Range in grams)
720-2270

Gestational age (weeks +/- standard deviation)
29 +/- 3
(Range in weeks)
24-34

Dose age (hours +/- standard deviation)
7.5 +/- 5.3
(Range in hours)
2-23

Extubation age (days +/- standard deviation)
8.5 +/- 10.4
(Range in days)
1-50

Outcome

Mortality: 6
Morbidity (n = 22)
Patent ductus arteriosus: 20
Pulmonary interstitial emphysema/pneumothorax: 7
Bronchopulmonary dysplasia: 12
Intraventricular hemorrhage: 9 (6 with grade 3-4)
Necrotizing enterocolitis: 2
Retinopathy of prematurity: 4

metry and transcutaneous O_2 and CO_2 sensors. The infant is positioned in a specified manner to distribute the Exosurf® homogenously.

A second dose usually is given 12 hours after the first dose, but this dose is held if the infant has improved to the point of extubation. The nurse monitors infant vital signs prior to instillation and at several intervals during instillation. The respiratory therapist is available to make ventilator changes as directed by the physician administering the surfactant. All other aspects of routine care, such as fluid therapy, thermoregulation, and glucose homeostasis are maintained throughout administration.

In order to study the effect of surfactant administration, we have obtained pulmonary function measurements prior to administration and then at specified intervals after therapy. Our methods for measuring pulmonary functions in the neonate, the PeDS system, is widely used in newborn intensive care nurseries.[9] A neonatal pneumotachometer, connected between the endotracheal tube and the ventilator tubing, measures flow. Tidal volume is obtained by integrating this flow. A differential pressure transducer, connected to a balloon in the infant's lower esophagus, measures esophageal pressure, a close estimate of intrapleural pressure. The transducer also measures airway pressure. The difference between these two pressures yields the transpulmonary pressure used to calculate pulmonary compliance and resistance by the PeDs system.

The PeDs system is a computerized program (distributed by Medical Association Services, Inc.) that estimates a best fit from the data and plots flow-volume, pressure-volume, and scalar curves. A printout is obtained of all these curves as well as an overall formulation of the data.

In Table 2, we present the results of our data on the first 28 patients. The dose age is the age of the infant when the first dose of surfactant was given (all attempts were made to give the medication as soon as the infant fit all criteria). The extubation age is the age of the infant when positive pressure ventilation no longer was necessary and the endotracheal tube was removed. In our unit, it is standard therapy to place infants on nasal CPAP after being extubated to prevent postextubation atelectasis. Only one of the infants required reintubation; this was

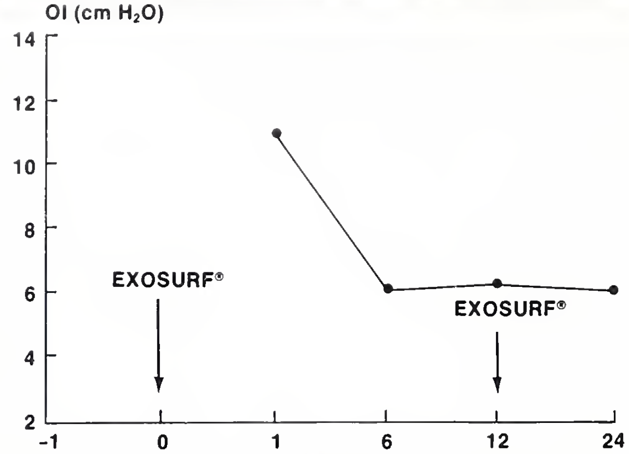

Figure 4. Exogenous surfactant administration: OI responses.

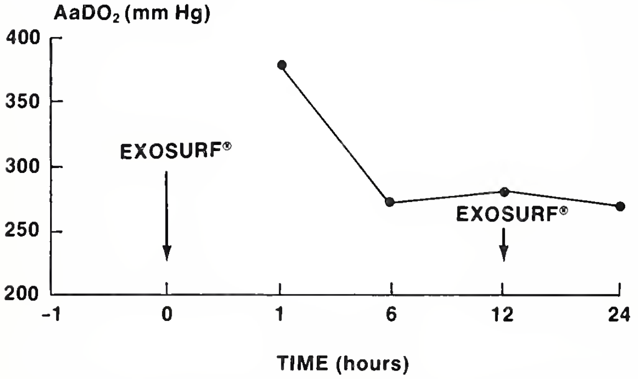

Figure 5. Exogenous surfactant administration: AaDO$_2$ responses.

due to postextubation stridor. Twelve infants developed bronchopulmonary dysplasia (BPD) and required oxygen therapy for more than 28 days, but only one of these infants required ventilation for more than three weeks. All of the infants were off supplemental oxygen prior to discharge.

Four of the six infants who died suffered from severe perinatal asphyxia at birth. One infant died from *E. coli* sepsis and the other death was in an extremely premature infant (gestational age of 24 weeks, birth weight of 720 g), who probably had pulmonary immaturity in addition to RDS. With respect to short-term morbidity, it is interesting to note that 20 of the infants had PDA, defined as echocardiographic evidence of a left to right shunt through the ductus arteriosus. Our standard protocol includes early echocardiography and early treatment of the PDA with indomethacin. This approach hopes to avoid the complications of a PDA and is the recommendation of Burroughs-Wellcome.

Other major short-term complications still are seen such as PIE and PTX. It is interesting to note that the incidence of these complications is no different than prior to surfactant therapy. Certainly barotrauma still is a major hazard and it may be even more dangerous during a sudden improvement in pulmonary compliance that can occur after surfactant administration. In fact, our early experience led us to decrease mechanical ventilation almost immediately after therapy. This reduction in barotrauma yielded a decreased incidence of PIE and PTX. The ability to lower mean airway pressure (MAP) is demonstrated in Figure 2.

We analyzed several other parameters during the course of surfactant therapy and these are shown in Figures 3, 4, and 5. The benefit of Exosurf® in regards to alveolar to arterial oxygen gradient (AaDO$_2$) and oxgenation index (OI), as well as the reduction in FiO2 is demonstrated. There is a great improvement within 6 hours after the first dose of Exosurf® and then a leveling off of the change thereafter. There actually may be a worsening after the second dose of Exosurf® since the expected rate of improvement decreases so rapidly. We must remember, however, that these infants still are in their first 24 to 36 hours of life. In the typical course of RDS, the infants worsen at this time with progressive atelectasis and pulmonary edema prior to recovery. However, with surfactant therapy, these infants are improving rather than deteriorating.

The acute benefit, however, does not necessarily prevent the infant from suffering some of the other consequences of prematurity such as NEC, IVH, or retinopathy of prematurity (ROP). These three complications occurred in the sickest and smallest infants and may be totally independent of the course of the infants' respiratory distress.

There have been several reports of the changes of pulmonary function with surfactant administration, using other formulations and not Exosurf®. In general, these reports have demonstrated an improvement in pulmonary compliance in surfactant-treated patients versus controls, but these improvements do not appear to be immediate. This result may be related to an overventilation inherent in mechanical ventilation such that the measurements are skewed to the overdistention part of the volume-pressure curve. Therefore, any improvement in compliance might be masked. Mechanical ventilation, unfortunately, is not as perfect as natural ventilation and higher pressures sometimes are needed to provide the same effective volume. Indeed, those infants given surfactant and being treated with CPAP alone, did demonstrate fairly immediate improvements in compliance.[10]

We have not been able to demonstrate immediate improvements in compliance in our measurements. However, our impression in a majority of the infants is that a clinical response occurs within one hour of administration. Observation of chest expansion after surfactant administration yields revealing information that has not yet been corroborated by our measurement of pulmonary function.

Despite the fact that significant changes in pulmonary compliance could not be demonstrated acutely, the majority of studies on surfactant replacement have demonstrated an overall improvement in mortality rate for low birth weight infants. In our unit, the mortality rate for infants 700 to 2,000 g is less than 5 percent. The smallest infants experience the highest mortality rate with infants less than 700 g having a mortality rate of 80 percent. Infants between 700 and 1,000 g experienced a mortality rate of 20 percent and then the rate dropped to 1 percent. Therefore, it is difficult to make conclusions about the effect of surfactant on mortality rate without a controlled trial. Likewise, for analysis of morbidity, a controlled, prospective study is necessary. There are several observations, however, that we feel can help us to formulate further studies with Exosurf®.

As was cited previously, the response to the first dose of surfactant is fairly dramatic, whereas after the second dose, 12 hours later, there actually may be a worsening of the infant's condition. It is possible that this second dose may be too much fluid for the now open alveoli to handle. The first dose is given presumptively when there is diffuse alveolar collapse and it is assumed that as the surfactant is spread throughout the airways, the alveoli start to expand and ventilation is improved. The second dose is given at a time when there already has been significant improvement and the infant probably has started to produce a significant amount of natural surfactant. The other possibility is that there is less uniformity of the atelectasis at the time of the second dose, such that some regions of the lung receive more surfactant than others. In either case, the amount of fluid from this second dose may be harmful. It is interesting to note that when Exosurf® is given prophylactically within 30 minutes of birth, there are no subsequent doses in the Burroughs-Wellcome protocol. Since infants are born with fluid-filled lungs, it is presumed that early administration will result in more efficient distribution. In fact, in a subset of our infants, early administration was associated with the most rapid improvement. These may be the infants who will not benefit from a second dose. It, therefore, would be of value to perform a study withholding the second dose. Further analysis on the timing of administration also would be important.

Long-term followup studies have been undertaken and data are being collected to determine the effects associated with surfactant replacement therapy. To date, no serious complications have been attributed to therapy; however, some institutions are finding that since the infants are getting off the ventilator quicker, they tend to manifest symptoms of apnea of prematurity sooner. This may or may not contribute to long-term morbidity.

Our recommendation at this time to the families of premature infants with RDS is that they consent for surfactant therapy to be included in the therapeutic regimen of their infants. There have been over 5,000 infants nationwide who have received Exosurf® and the data are encouraging. Ideally, the prevention of prematurity and RDS should be our ultimate goal. Since this aim is unreachable at least in the forseeable future, our challenge is to treat the problems of prematurity with the best possible therapy of today that includes surfactant replacement.

CONCLUSION

There are several important aspects of surfactant replacement to be studied. Controlled studies comparing the different types of surfactant need to be undertaken in a multi-institutional fashion to enroll as many infants as is necessary to reach acceptable conclusions. New and better types of surfactants will be available in the future, such as genetically engineered surfactant. Questions regarding timing of administration and amount of these drugs need to be further analyzed. ■

REFERENCES

1. Avery ME, Mead J: Surface properties in relation to atelectasis and hyaline membrane disease. *AJDC* 97:517-523, 1959.
2. Shapiro D: The development of surfactant replacement therapy and the various types of replacement surfactants. *Seminars Perinatol* 12:174-179, 1988.
3. Fanaroff AA, Martin RJ: *Neonatal Perinatal Medicine, Disease of the Fetus and Infant.* Philadelphia, PA, C.V. Mosby Company, 1987, pp. 580-589.
4. Notter R: Biophysical behavior of lung surfactant: Implications for respiratory physiology and pathophysiology. *Seminars Perinatol* 12:180-212, 1988.
5. Jobe A: *Surfactant and the Developing Lung, Neonatal Pulmonary Care.* Philadelphia, PA, Appleton-Century-Crofts, pp. 75-99.
6. Weaver TE, Whitsett JA: Structure and function of pulmonary surfactant proteins. *Seminars Perinatol* 12:213-220, 1988.
7. Notter RH, Shapiro DL: Lung surfactants for replacement therapy: Biochemical, biophysical, and clinical aspects. *Clinics Perinatol* 14:433-478, 1987.
8. Vidyasagar D, Shimada S: Pulmonary surfactant replacement in respiratory distress syndrome. *Clinics Perinatol* 14:991-1015, 1987.
9. England SJ: Current techniques for assessing pulmonary function in the newborn and infant: Advantages and limitations. *Pediatr Pulmonol* 4:48-53, 1988.
10. Davis JM, Veness-Meehan K, Notter RH, et al.: Changes in pulmonary mechanics after the administration of surfactant to infants with respiratory distress syndrome. *N Engl J Med* 319:476-479, 1988.

STATEMENT OF OWNERSHIP, MANAGEMENT, AND CIRCULATION

(Required by 39 U.S.C. 3685)

1. Title of Publication: NEW JERSEY MEDICINE.

1A. Publication No.: 00257524.

2. Date of Filing: September 20, 1990.

3. Frequency of Issue: Monthly.

3A. No. of Issues Published Annually: 12.

3B. Annual Subscription Price: $35.

4. Location of Known Office of Publication: 2 Princess Road, Lawrenceville, Mercer County, NJ 08648.

5. Location of Headquarters or General Business Office of the Publisher: 2 Princess Road, Lawrenceville, Mercer County, NJ 08648.

6. Names and addresses of publisher, editor, and managing editor: Publisher, Medical Society of New Jersey, 2 Princess Road, Lawrenceville, NJ 08648. Editor, Howard D. Slobodien, MD, 2 Princess Road, Lawrenceville, NJ 08648. Managing Editor, Geraldine R. Hutner, 2 Princess Road, Lawrenceville, NJ 08648.

7. Owner (if owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given. If the publication is published by a nonprofit organization, its name and address must be stated.): Medical Society of New Jersey, 2 Princess Road, Lawrenceville, NJ 08648 (a nonprofit corporation of New Jersey).

8. Known bondholders, mortgages, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities: None (a nonprofit corporation of New Jersey).

9. For completion by nonprofit organization authorized to mail at special rates (Section 411.3, DMM only). The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes have not changed during preceding 12 months.

10. Extent and nature of circulation:

	Extent and nature of circulation	Average no. copies each issue during preceding 12 months	Actual no. copies of single issue published nearest to filing date
A.	Total no. copies printed (net press run)	10,576	10,295
B.	Paid circulation		
	1. Sales through dealers and carriers, street vendors, and counter sales	—	—
	2. Mail subscriptions	9,767	9,486
C.	Total paid circulation (sum of B1 and B2)	9,767	9,486
D.	Free distribution by mail carrier or other means—samples, complimentary, and other free copies	589	589
E.	Total distribution (sum of C and D)	10,356	10,075
F.	Copies not distributed		
	1. Office use, left-over, unaccounted, spoiled after printing	220	220
	2. Return from new agents	—	—
G.	Total (sum of E, F1, and 2—should equal net press run shown in A)	10,576	10,295

11. I certify that the statements made by me above are correct and complete.

(signed) Arthur White
Director of Finance and Administrative Services

12. For completion by publishers mailing at the regular rates (Section 132.121, Postal Service Manual), 39 U.S.C. 3626 provides in pertinent part: "No person who would have been entitled to mail matter under former section 4359 of this title shall mail such matter at the rates provided under this subsection unless he files annually with the Postal Service a written request for permission to mail matters at such rates." In accordance with the provisions of this statute, I hereby request permission to mail the publication named in item 1 at the phased postage paid rate presently authorized by 39 U.S.C. 3626.

NOTEBOOK

TRUSTEES' REPORT

A meeting of the Board of Trustees was held on September 16, 1990, at the executive offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society; a summary of significant actions follows.

Report of the President . . .
(1) Appointments: Noted the following appointments: Dr. Fred M. Palace as MSNJ representative to the Board of the New Jersey Hospital Association; Dr. Louis L. Keeler as MSNJ Board representative to the Academy of Medicine of New Jersey Board of Trustees; and Dr. Edward A. Schauer as chairman of the Committee on Long-Range Planning and Development.

Report of Executive Director . . .
(1) MSNJ Financial Statements . . . Reviewed and approved the financial statements for the periods ending June 30 and July 31, 1990.
(2) Litigation: Noted the following: argument on the medical malpractice surcharge case (MSNJ versus Merin) will be heard in the appellate division in September; oral argument in the tax court for this case (MSNJ is challenging three aspects of the no-fault law: the $100 license charge, the mandated fee schedule, and a ban on balance billing) has been delayed.
(3) Regulatory Activity . . . Received copies of Judge Stern's comments regarding the physician assistants proposal (page 769 of *NEW JERSEY MEDICINE*) and MSNJ's response to the medical fee schedule rule (page 767 of *NEW JERSEY MEDICINE*); and Mr. Maressa noted that until the fee schedule is adopted, physicians should bill at their usual rates.

(4) NJ State Medical Underwriters, Inc. (NJSMU) . . . Was notified that Judge Stern has been retained as legal counsel concerning the no-fault surcharge being assessed all casualty insurance companies in New Jersey, and approved a bylaw change for the title of the president of NJSMU to become "president and chief executive officer."
(5) Medicare . . . Noted the following: progress has been made on the issue of assistants at surgery with Dr. Ian Samson as the designated speaker on the topic; approval is to be given for an assistant at appendectomies as well as a number of procedures on Pennsylvania Blue Shield's medical necessity list; Pennsylvania Blue Shield mailed 2,600 MAAC exceeder letters and 2,200 physicians have appealed; and unique physician identifier numbers (UPIN) will be reissued via a general mailing to physicians.
(6) New Jersey State Department of Health Licensing Standards for Hospitals . . . Approved the following recommendation:

That Rule 8:43G-12.5, under Subchapter 12—Emergency Department, of the New Jersey State Department of Health Licensing Standards for Hospitals, reads as follows:

There shall be a physician specialist on call to the emergency department for each major clinical service provided by the hospital. On-call physicians shall be able to arrive within 30 minutes after being summoned for a critical case, under normal transportation conditions.

UMDNJ Report . . . Publicized a walkathon in New Brunswick sponsored by University Champions to benefit HIV positive women and children and a march in New Brunswick sponsored by the Hyacinth Foundation to help AIDS victims physically and financially; and noted a 15 percent increase in tuition for medical and dental students and a tuition increase approaching 35 percent for allied health programs.

NJ Hospital Association . . . Noted the following: the Maternal Outreach and Managed Services program (MOMS) was tabled by the Health Care Administration Board due to concerns about funding; a representative of NJHA will be invited to discuss uncompensated care at the next meeting of the Council on Public Relations; comments on the Governor's Commission report will be forthcoming.

Audit Review Committee . . . Approved the following recommendations:

That the audited financial statements be accepted and a copy thereof be forwarded to each component society.

That Ernst & Young be continued as the external auditors.

Task Force on the Shortage of Nurses and Technical Personnel . . . Approved the following recommendations:

That members of MSNJ be urged to:

Distribute and make available in their offices, hospitals, and clinics, pamphlets and brochures concerning ca-

> reers and educational programs in the allied health professions. (Such pamphlets are available from NJHA Nursing and Allied Health Resource Center.) Make informed educational referrals for students, patients, and others where appropriate toward careers in the allied health professions. Participate in and support the allied health educational programs in their area. Support legislation for allied health programs in New Jersey.
>
> Support appropriate salary levels for allied health professionals. Include the allied health professional in an appropriate level of discussion concerning patients and procedures. Respect the allied health professional as an essential and endangered member of the health care team.

Also, discharged the Task Force on the Shortage of Nurses and Technical Personnel and MSNJ will provide representatives to appropriate organizations for medical input; expressed appreciation to Doctor Madara and the Task Force.

Senior Citizens Task Force . . . Approved the following recommendation and directed that it be referred to the Council on Public Relations for implementation:

> That MSNJ provide posters to physicians announcing that the office participates in the Senior Medical Courtesy Program, similar to the poster used by the Union County Medical Society.

Task Force on AIDS . . . Approved the following recommendations:

> That the Board of Trustees approve the New Jersey Hospital Association Comprehensive AIDS/HIV Legislation with the changes suggested by MSNJ's Task Force on AIDS.
>
> That the Board of Trustees retain its position as stated in "AIDS: Information for Physicians" under "Medical Society of New Jersey Policy on AIDS—HIV Testing."
>
> That the Board of Trustees establish a dialogue with the New Jersey State Department of Health to work toward the elimination of the Department of Health recommendation that a special consent form be used to test for HIV. Testing should be performed when it is clinically indicated without interference or obstruction.

Unfinished Business . . . Noted the following items: Tax Deductions for Uncompensated Care (Resolution #15): accepted the results of the study to determine what type of patient is the most likely to sue a doctor; Dr. James E. George stated that it would be an unwise expenditure of time and resources to attempt to prove the thesis that uncompensated care cases or indigent cases in fact are a medicolegal hazard for physicians; HIV Testing for Hospital Admissions (Resolution #27E): referred this resolution to the Task Force on AIDS for determination as to whether or not the Society should seek legislation to implement the intent of the resolution (all hospital admissions have HIV testing); HIV Infection as a Communicable Disease (Resolution #1): referred this resolution (calling for MSNJ to adopt that policy that states HIV infection be considered as any other reportable communicable disease, and patients be treated accordingly) to the Task Force on AIDS. ☐

UMDNJ NOTES

Computer Program Replaces Pathology Lectures. Second-year medical students at UMDNJ-Robert Wood Johnson Medical School are using a customized computer software program—developed at the school—to learn pathology, the study of the nature, and cause of diseases. Two major elements have replaced the lecture format for teaching pathology at the school: the software/video disk and twice-a-week small-group study sessions. Dr. Robert Trelstad, chairman of the Department of Pathology, and Dr. Jana Raskova, professor of pathology, are the architects of this program that gives students more time to talk with professors to get information clarified and interpreted.

The computer software program, incorporating the pathology textbook and a base of 5,000 questions, was developed by Dr. Trelstad, who selected 1,500 images from a 26,000-based video disk developed by the University of Utah Medical School in Salt Lake City.

Special Dental Clinic To Open in Camden. A dental clinic for patients with AIDS and other infectious diseases, operated by UMDNJ-New Jersey Dental School, will open soon. Located at 221-223 South Sixth Street, Camden, the clinic is similar to the UMDNJ Special Services Dental Clinic in Newark, that also treats infectious disease patients. The clinics are the only state-funded, public dental facilities of the kind in New Jersey. Dr. Talib Najjar, professor of oral and maxillofacial surgery, will direct the clinic. It also will be staffed by dental school faculty and postdoctoral students.

The treatment clinic also will serve as a research facility for AIDS.

State Assembly Commends Sickle Cell Centers. The New Jersey General Assembly has adopted a resolution commending UMDNJ for its operation of Sickle Cell Centers in southern New Jersey to serve adults with the disease. The resolution, presented by Assembly Majority Leader Wayne R. Bryant (D-5th Dist.), cited the establishment of Centers in Camden and Stratford "as part of the University of Medicine and Dentistry of New Jersey's commitment to provide health care services to the medically indigent residents of this State." The Centers were instituted by UMDNJ-School of Osteopathic Medicine and its Department of Medicine, Division of Hematology/Oncology.

The resolution noted, "These centers provide a comprehensive health care program for adult sickle cell patients and their families to provide an educational component that encompasses the community, the patients, their families, and their health care providers. Through these vital clinics, UMDNJ is effectively addressing one of the crucial health care concerns of a significant minority population of this state and participating in the quest for a cure for sickle cell diseases." ☐ Stanley S. Bergen, Jr., MD

MSNJ AUXILIARY

Membership is increasing and the Auxiliary is making every effort to maintain the trend into the 21st century. Success of the challenge depends on two factors: attracting and sustaining as members the growing number of career-oriented physicians' spouses who have a special expertise to contribute to the Auxiliary but whose degree of participation, or lack of it, is engendered by unavoidable time constraints, and the Auxiliary's ability to become more flexible in its operations and to focus on the "newness" of the organization in order to recruit spouses of the increasingly large number of female physicians. Auxiliary leaders believe the addition of male members could provide a divergent point of view and innovative ideas—perhaps even a change in the public's conception of the role of a medical auxiliary.

The Auxiliary's recruitment strategy involves making membership convenient and personally rewarding. Meetings are more streamlined with no time wasted on lengthy programs or prolonged social hours. Program topics are planned to appeal to all segments of the membership: male, female, career-oriented, housewives, widows, widowers, and resident physician and medical student spouse groups. Members may choose their level of commitment and support: for some this may mean simply paying dues and for others it may mean legislative lobbying, AMA-ERF fundraising, or tending to community health needs.

Regardless of commitment level, the benefits of membership are enormous. The Auxiliary offers personal development through leadership training and educational seminars and resources. The professional skills development (PSD) program, designed to turn volunteer training into marketable job skills, provides a central source for documentation of members' participation in instructional courses, training programs, and AMA Auxiliary leadership positions. All information is computerized and readily available for withdrawal when needed for career opportunities. Publications such as *Facets* and *The Shingle* are provided to members on a regular basis. The magazines are written for and about physicians' spouses with current data on health legislation as well as a wide range of topics related to the medical profession and the medical family. Available also are special discounts on hotels, rental cars, videocassettes, insurance, and investment services. Most importantly, however, the Auxiliary provides fellowship—an opportunity to meet other physician families, to share information, and to discuss common concerns through a nationwide network of 75,000 physicians' spouses with similar goals.

The Auxiliary urges MSNJ physicians to encourage spouses to become part of this lifetime activity and share the benefits of belonging. ☐ Marion H. Geib

QUALITY OF LIFE AND HEALTH

A potential solution to the dual problem of access and cost may be an evolving broad-based consensus in support of health care effectiveness research. The Quality of Life and Health Survey (QLHS) will develop a standard instrument that can be used in a variety of settings to measure patient values about treatment outcomes.

The Citizens' Committee on Biomedical Ethics (CCBE), a private, nonprofit, grassroots or-

CANDIDATES FOR MSNJ OFFICES

If you are interested in becoming an Officer, Trustee, or member of the AMA Delegation, a new opportunity exists for you.

The Nominating Committee is meeting to consider candidates. The Committee will consider members other than those recommended by county medical societies and nominating delegates for any of these offices.

If you wish to be considered, please contact your county medical society or the Medical Society of New Jersey for the necessary forms.

This is a real opportunity for grassroots candidate development and we urge you to use it.

ganization, is participating with the University of Colorado Center for Health Ethics and Policy in the QLHS, funded by Pew Charitable Trusts. The purpose of the project is to develop an instrument that is statistically reliable in measuring the public and patients' perceptions about medical/surgical treatment outcomes. The instrument developed is framed entirely from people's perceptions about problems in living, rather than by reference to objective facts gathered by others.

When evaluating health care services on the basis of expected benefit, it is necessary to utilize a common language by which a health benefit can be measured and compared across different types of interventions. This common language involves the impacts of treatment on life expectancy and quality of life. Judgments concerning expected benefits of health care must be based on a full range of information bearing on the particular intervention for a specific class of patients (or specific indications). There are three types of information: 1. physician estimates about health outcomes based on findings in the literature and on medical experience; 2. information from patients concerning perceptions of the quality of life outcomes of particular interventions; 3. societal values concerning health outcomes associated with the treatment.

A variety of biases exists in asking patients to make these judgments. First, only living patients can provide this information which biases patient responses in favor of the intervention. Second, patients may tend to overestimate the benefits realized from treatment in order to justify their actions to themselves. Again, this bias acts in favor of the intervention. Third, eliciting quality of life data only from patients who elected to receive the interventions without equal efforts to obtain similar information from patients who considered but declined to receive the intervention, may obscure the extent to which any perceived quality of life improvements reflect a significant improvement from what would have occurred had the intervention been foregone.

The QLHS asks patients about the extent to which quality of life is a problem for them.

This frame has been selected to guard against potential use of information to judge someone else's quality of life for two reasons: objective functional data obtained in most quality of life questionnaires are useful for individual physician and patient decision making but such data do not necessarily relate well to perceived quality of life and not everybody is ready to accept quality of life as a legitimate basis for resource distribution decisions.

The entire potential patient population is prospectively at risk for ill health, and will or will not have access to desired health care depending on distribution decisions. It seems appropriate, therefore, that values of the general citizenry be used for purposes of resources distribution.

To analyze how society should distribute resources, it is imperative that we include people's perceptions about the benefits and burdens of treatments. This project is a beginning effort to obtain these perceptions by developing a reliable questionnaire to gather these perceptions. ☐ Theresa H. Hauber, MPH

MSNJ DIRECTORY

Data sheets for the 1991 Medical Society of New Jersey *Membership Directory* have been mailed to all members. Please complete the data sheets and return them in the self-addressed, stamped envelope. To be included in the 1991 *Membership Directory,* data sheets need to be returned by November 15, 1990. If you have any questions, please call Mrs. Joyce Guest, 609/896-1766, at MSNJ headquarters.

PLACEMENT FILE

The following physicians have written to the executive offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information has been supplied by the physicians. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY

Michael Silverberg, MD, 2020 Walnut St., Apt. 29K, Philadelphia, PA 19103. Yale 1983. Board eligible. Group or hospital. Available July 1991.

CARDIOLOGY

George D. Birmingham, MD, 3531 Salerno Ct., Apt. 5, Middleton, WI 53562. Mount Sinai 1984. Board eligible. Board certified (IM). Group or partnership. Available July 1991.

INTERNAL MEDICINE

Anan Adnan Faidi, MD, 30 Charles St. W, Apt. 1717, Toronto, Ontario, IM4Y 1R5 Canada. Jordan 1983. Board certified. Also, board eligible (ENDOCRIN). Group. Available.

Suresh Reddy, MD, 3301 Cobblestone Cir., #6, Waterloo, IA 50703. Kakatiya (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

NUCLEAR MEDICINE

Haresh P. Solanki, MD, 3 West Elm St., Islip, NY 11751. MP Shah Medical College (Iran) 1980. Board eligible. Group or hospital based. Available.

PHYSICAL MEDICINE AND REHABILITATION

Robert B. Thorne, MD, 112 Woodside Ave., Trenton, NJ 08618. Rutgers 1980. Board certified. Part time or full time. Available.

SURGERY

Donna Vecchione, MD, 27700 Bishop Park Dr., 4025, Willoughby Hills, OH 44092. SUNY-Stony Brook 1985. Board eligible. Partnership, solo, multispecialty group. Available.

UROLOGY

Ronald G. Frank, MD, 380 Rector Pl., Apt. 11J, New York, NY 10280. New York Medical 1985. Group or partnership. Available July 1991.

1991 MSNJ ANNUAL MEETING

The Board of Trustees of the Medical Society of New Jersey approved the Committee on Annual Meeting's recommendation that the 1991 Annual Meeting be held at the Trump Taj Mahal Casino Resort in Atlantic City, on Sunday, April 28, through Wednesday, May 1, 1991. The Merv Griffin's Resorts Casino Hotel will participate with the headquarters hotel (Trump Taj Mahal) for the 1991 Annual Meeting. The daily schedule follows:

Saturday, April 27, 1991

3:30 p.m.	Board of Trustees' Meeting

Sunday, April 28, 1991

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
10:00 a.m.	Educational Programs
11:30 a.m.	Exhibits Open
1:30 p.m.	House of Delegates
3:30 p.m.	Reference Committee Meetings

Monday, April 29, 1991

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates (Election)
12:00 noon	Golden Merit Award Ceremony and Reception
2:30 p.m.	Reference Committee Meetings
5:00 p.m.	JEMPAC Political Forum
5:45 p.m.	JEMPAC Wine and Cheese Reception
6:30 p.m.	Union County Medical Society Reception

Tuesday, April 30, 1991

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Exhibits Open
9:00 a.m.	House of Delegates
1:30 p.m.	House of Delegates
7:00 p.m.	Inaugural Reception and Dinner honoring Doctor and Mrs. Joseph A. Riggs

Wednesday, May 1, 1991

8:00 a.m.	Registration Opens
8:00 a.m.	Message Center Opens
8:30 a.m.	Educational Program
1:00 p.m.	Board of Trustees' Meeting

HOUSING APPLICATION

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THE MEDICAL SOCIETY OF NEW JERSEY
APRIL 28-MAY 1, 1991

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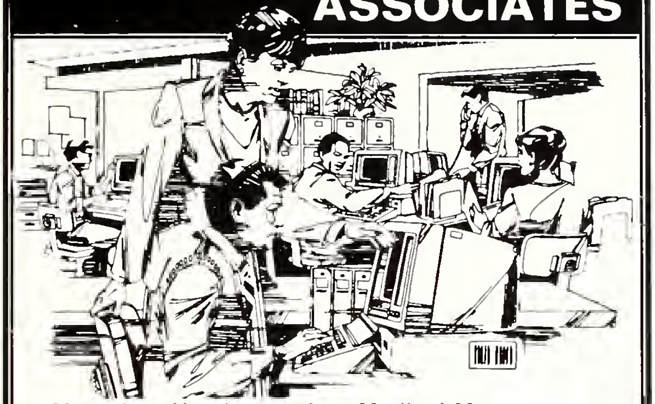

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CONTINUING EDUCATION

ANESTHESIOLOGY

January

15 **Meeting**
6-9 P.M.—Ramada Inn, Clark
(New Jersey State Society of Anesthesiologists)

17 **Geriatric Anesthesia**
8-9 A.M.—Dover General Hospital, Dover
(AMNJ)

CARDIOLOGY

December

11 **What's New in Heart Failure**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

13 **Newer Cardiac Drugs**
8-9 P.M.—Centrastate Medical Center, Freehold
(AMNJ)

DERMATOLOGY

January

8 **Nail Disease**
7-9 P.M.—Schering Corporation, Kennilworth
(Dermatological Society of New Jersey)

16 **Case Presentations**
6-9 P.M.—RCHP, US Route 1, New Brunswick
(UMDNJ, Division of Dermatology)

INFECTIOUS DISEASE

December

7- **HIV and the Health**
8 **Professional**
All day—UMDNJ-Newark
(UMDNJ)

January

9 **Diagnosis and Treatment of AIDS**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ and NJDOH)

9 **Diagnosis and Treatment of AIDS**
11:30 A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ and NJDOH)

9 **Diagnosis and Treatment of AIDS**
12 Noon-1 P.M.—Warren Hospital, Phillipsburg
(AMNJ and NJDOH)

11 **Identification and Management of Asymptomatic HIV-Infection**
10-11 A.M.—Marlboro Psychiatric Hospital, Marlboro
(AMNJ and NJDOH)

23 **Diagnosis and Treatment of AIDS**
12 Noon-1 P.M.—Union Hospital, Union
(AMNJ and NJDOH)

30 **Identification and Management of Asymptomatic HIV-Infection**
12 Noon-1 P.M.—Union Hospital, Union
(AMNJ and NJDOH)

MEDICINE

December

1 **39th Annual Clinical Meeting**
8:30 A.M.-4:30 P.M.—Robert Wood Johnson Medical School, Piscataway
(American College of Surgeons and AMNJ)

4 **Grand Rounds**
11 8:30-10 A.M.—Elizabeth General
18 Medical Center, Elizabeth
25 *(Elizabeth General*
Medical Center)

4 **Nephrotoxicity of Common Drugs**
8-9 A.M.—Underwood Memorial Hospital, Woodbury
(AMNJ)

4 **Case Presentation**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

5 **Septic Shock**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

5 **Clinical Abstract Meeting**
1:30-5 P.M.—The Manor, West Orange
(Oncology Society of New Jersey)

5 **Legal Liability for T.D.**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

12- **CO$_2$ Laser Surgery**
13 7:30 A.M.-4:30 P.M.—UMDNJ, Newark
(UMDNJ)

12 **Critical Care Topics**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

12 **Extrapyramidal Symptoms**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

12 **Prevention of Lower Extremity Amputations**
1:30-2:30 P.M.—Roosevelt Hospital, Metuchen
(AMNJ)

13- **Sinus Endoscopy**
14 7:30 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

13 **Doctor/Patient Sex and Medicolegal Issues**
12 Noon-1 P.M.—Carrier Foundation, Belle Mead
(Carrier Foundation)

13 **New Developments in Emergency Medical Care in New Jersey**
12 Noon-1 P.M.—Community Medical Center, Toms River
(AMNJ)

18 **Evaluation of Cholesterol Awareness**
9-10 A.M.—Holy Name Hospital, Teaneck
(Holy Name Hospital)

19 **Aspiration Syndrome in the Mentally Retarded**
9-10 A.M.—Warren Hospital, Phillipsburg
(AMNJ)

19 **Strokes**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

21 **Prevention of Lower Extremity Amputations**
12 Noon-1 P.M.—South Jersey

Hahnemann University

Department of Medicine

Department of Medicine
GRAND ROUNDS WEDNESDAYS
8:30 a.m.-9:30 a.m.

November-December, 1990

NOVEMBER, 1990

November 7, 1990
STEROID ABUSE IN THE ATHLETE
Robert Cantu, MD
Chairman of Surgery
Director, Services of Sports Medicine
Emerson Hospital, Concord, MA
Consultant, Sports Medicine Committee
USA American Boxing Federation

November 14, 1990
CONTROVERSIES IN NON-CARDIAC CHEST PAIN (Gastro-Esophageal Reflux, Achalasia)
Sidney Cohen, MD
Professor and Chairman of Medicine
Temple University School of Medicine
Philadelphia, PA

November 21, 1990
AGING OF THE SKIN
Richard L. Speilvogel, MD
Professor of Medicine and Dermatology
Director, Division of Dermatology
Hahnemann University

November 28, 1990
MEDICAL MANAGEMENT OF DEPRESSION AND ANXIETY
Gary Tollefson, MD, PhD
Associate Professor of Psychiatry
University of Minnesota, MN
Jonathan O. Cole, MD
Chief, Psychopharmacology Program
McLean Hospital, Belmont, MA

DECEMBER, 1990

December 5, 1990
PTCA VS BYPASS GRAFT SURGERY FOR CORONARY ARTERY DISEASE
William S. Frankl, MD
Vischer Professor of Medicine and Chairman, Department of Medicine
Director, Likoff Cardiovascular Institute
Hahnemann University

December 12, 1990
ABNORMALITIES OF THROMBOSIS AND THROMBOEMBOLISM
Daniel Deykin, MD
Chief of Medicine, Director, Health Services Research and Development
Boston VA Medical Center, MA

December 19, 1990
DIVISION OF PULMONARY MEDICINE AND CRITICAL CARE
Edward Schulman, MD
Associate Professor of Medicine
Director, Division of Pulmonary and Critical Care Medicine
Hahnemann Universtiy

WEDNESDAY MEDICAL SEMINAR SERIES
8:30 a.m.-3:30 p.m.

November 7, 1990
MEDICINE IN ATHLETICS

November 28, 1990
MEDICAL MANAGEMENT OF DEPRESSION AND ANXIETY

December 12, 1990
ABNORMALITIES OF THROMBOSIS AND THROMBOEMBOLISM

Seminar Directors:

William S. Frankl, MD
Professor of Medicine
and Chairman
Department of Medicine

Allan B. Schwartz, MD
Professor of Medicine
Director, Continuing
Medical Education for the
Department of Medicine

Location:
Classroom C (Alumni Hall)
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Hospital System, Bridgeton
(AMNJ and NJDOH)

26 **Diabetic Retinopathy**
12 Noon-1 P.M.—Union Hospital, Union
(AMNJ and NJDOH)

January

2 **Hyperalimentation**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

8 **Internal Medicine Update and**
15 **Board Review**
22 5:30-7:30 P.M.—Cooper Hospital/
29 University Medical Center, Camden
(Cooper Hospital/University Medical Center)

9 **Diabetic Retinopathy**
1:30-2:30 P.M.—Roosevelt Hospital, Metuchen
(AMNJ)

9 **Diabetic Nephropathy**
2-3 P.M.—Welkind Rehabilitation Hospital, Chester
(AMNJ)

9 **Living Wills**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

9 **Hypertension—New Drug Regimens**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

10- **Sinus Endoscopy**
11 7:30 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

14 **Diabetic Nephropathy**
1-2 P.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ)

15 **Beyond Correction of Anemia—Erythropoietin in the ESRD Patient**
6:30-9:30 P.M.—Overlook Hospital, Summit
(Nephrology Society of New Jersey)

15 **Asbestos-Associated Diseases**
8-9 A.M.—Underwood Memorial Hospital, Woodbury
(AMNJ)

16 **Diabetic Nephropathy**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

16 **Internal Medicine Review**
23 **Course**
30 4-7 P.M.—University Hospital, New Brunswick
(AMNJ and UMDNJ)

17 **New Treatment Modalities and Implications for the Future in Diabetes**
10-11 A.M.—Hunterdon Developmental Center, Cedar Grove
(AMNJ)

18 **Juvenile Onset Diabetes**
8-9 A.M.—Dover General Hospital, Dover
(AMNJ)

23 **Peptic Ulcer Disease**
2:30-3:30 P.M.—Trenton Psychiatric Hospital, Trenton
(AMNJ)

25 **Detoxification: Commonly Used Drugs**
10-11 A.M.—Marlboro Psychiatric Hospital, Marlboro
(AMNJ)

30 **Chronic Epstein-Barr Virus**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ)

OBSTETRICS/GYNECOLOGY

December

6 **Diabetes in Pregnancy**
8-9 A.M.—Our Lady of Lourdes Medical Center, Camden
(AMNJ)

13- **CO_2 Laser Applications**
15 **in Ob/Gyn**
8 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

January

9 **Estrogen Replacement Therapy**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

11 **Postoperative Toxic Shock Syndrome**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(AMNJ)

14 **Adolescent Menstrual Disorders**
12 Noon-1 P.M.—Warren Hospital, Phillipsburg
(AMNJ)

18- **4th Annual Practice Approaches**
21 **to Ob/Gyn**
7:30 A.M.-1 P.M.—Cozamel, Mexico
(UMDNJ)

25 **Diabetes in Pregnancy**
7:30-8:30 A.M.—Kennedy Memorial Hospital, Washington Township
(AMNJ)

ONCOLOGY

December

5 **Annual Clinical Abstract Meeting**
1:30-5 P.M.—The Manor, West Orange
(Oncology Society of New Jersey)

13 **Meeting: Head and Neck Oncology Section**
6:30-9:30 P.M.—The Hyatt, New Brunswick
(AMNJ)

14 **Tumor Board Conference**
11 A.M.-12 Noon—Wallkill Valley Hospital, Sussex
(Wallkill Valley Hospital and AMNJ)

27 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(AMNJ)

January

16 **Current Chemotherapy**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

SURGERY AND ITS SPECIALTIES

December

10 **Surgical Treatment of Peptic Ulcer Disease**
11:30 A.M.-1 P.M.—East Orange General Hospital, East Orange
(AMNJ)

15- **CO_2 Laser—ENT**
16 8 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

January

7 **Surgical Treatment of Chronic Pancreatis**
11:30 A.M.-1 P.M.—East Orange General Hospital, East Orange
(AMNJ)

10- **Sinus Endoscopy**
11 7:30 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

11 **Postoperative Toxic Shock Syndrome**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(AMNJ)

UROLOGY

December

6 **Grand Rounds**
13 7-9 P.M.—Robert Wood Johnson
20 Medical School, Piscataway
(UMDNJ)

January

8 **Winter Meeting**
Holiday Inn, Jamesburg
(Urology Society of New Jersey)

PHILADELPHIA HEART INSTITUTE

Presbyterian Medical Center

Cardiology Update

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Wednesday, December 5, 1990

Angina Pectoris

Moderator: Ami E. Iskandrian, M.D.

3:00-3:30	Angina pectoris in patients with coronary heart disease	***Ami E. Iskandrian, M.D.***
3:30-4:00	Angina pectoris in patients with non-coronary disease	***William Corin, M.D.***
4:00-5:00	Case Presentations Panel Discussion ***Philip A. Bhark, M.D.*** ***Michael S. Feldman, M.D.*** ***Marvin Rosner, D.O.***	***Sally G. Beer, M.D.*** ***William J. Untereker, M.D.*** ***Jan R. Weber, M.D.***

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IN MEMORIAM

Frederick S. Barnes. Internist Frederick Sheldon Barnes, MD, died on April 4, 1990. Born in 1922, Dr. Barnes received his medical degree from the State University of New York College of Medicine, New York, in 1946. Dr. Barnes had his practice in Passaic. Dr. Barnes was a member of the American Medical Association and of our Hudson County component, and was a fellow of the American College of Legal Medicine.

Alfred Del Vecchio. After a long illness, Forked River resident Alfred Del Vecchio, MD, died on June 26, 1990, at the age of 64. Born in Hoboken on September 13, 1925, Dr. Del Vecchio earned his medical degree from the University of Bologna, Italy, in 1956. Dr. Del Vecchio received his New Jersey medical license in 1957 and served his internship and residency at the former Martland Memorial Center, Newark. Dr. Del Vecchio was affiliated with: Pascack Valley Hospital, Westwood; Holy Name Hospital, Teaneck; Hackensack Medical Center; and Community Medical Center, Toms River, where he helped to establish the electroencephalography department. Retired since 1986, Dr. Del Vecchio maintained a family practice in Hillsdale and Toms River. Dr. Del Vecchio was a lieutenant in the United States Air Force from 1943 to 1947. Dr. Del Vecchio was a member of the American Medical Association and of our Bergen County component.

Frederick J. Faux. Retired Woodbury resident Frederick John Faux, MD, died at the age of 79 on February 3, 1990. Born in Philadelphia on February 10, 1910, Dr. Faux earned his medical degree from Jefferson Medical College of Philadelphia in 1939 and his New Jersey medical license the following year. Dr. Faux served his residency and internship at Cooper Hospital, Camden. Board certified in obstetrics-gynecology, Dr. Faux practiced in Woodbury. He was affiliated with Underwood Hospital, Woodbury, and Cooper Medical Center, Camden. Dr. Faux served in the U.S. Navy as a lieutenant commander from 1942 to 1946. Dr. Faux was a member of our Gloucester County component, of the American Medical Association, of the New Jersey Obstetrics-Gynecology Society, and of the Philadelphia Obstetrics Society, and a fellow of the American College of Obstetricians and Gynecologists. Dr. Faux served on the Council of the New Jersey Obstetrics-Gynecology Society and was past-president of our Gloucester County component.

Urban R. Finnerty. At the age of 80, Urban Raymond Finnerty, MD, of Myrtle Beach, South Carolina, died on July 12, 1990. Born August 19, 1909, in Montclair, Dr. Finnerty earned his medical degree from Georgetown University School of Medicine, Washington, DC, in 1934. He received his New Jersey medical license one year later. A colon and rectal surgeon, Dr. Finnerty maintained a practice in Montclair. He was affiliated with the former St. Vincent's Hospital, Montclair; St. Mary's Hospital, Orange; St. Mary's Hospital, Passaic; The Mountainside Hospital, Montclair; Lutheran Medical Center, New York; and the former Hospital of St. Barnabas for Women and Children, Newark. Dr. Finnerty was a member of our Essex County component, of the American Medical Association, and of the Medical Society of South Carolina, and a fellow of the International College of Surgeons. Dr. Finnerty served as a commander in the U.S. National Reserves from 1942 to 1946.

Harold H. Goldberg. Board certified in psychiatry and neurology, Harold H. Goldberg, MD, died on July 16, 1990, at the age of 67. Born in Chicago, on July 28, 1922, Dr. Goldberg earned his medical degree from Albany Medical College, New York, in 1952, his New York medical license in 1953, and his New Jersey medical license in 1960. Dr. Goldberg interned at Kings County Hospital Center, Brooklyn. Dr. Goldberg maintained a practice in Brooklyn and Hackensack, and was affiliated with Kings County Hospital Center; Brooklyn Hospital; Methodist Hospital, Brooklyn; Pascack Valley Hospital, Westwood; Hackensack Medical Center; Bergen Pines County Hospital, Paramus; and Holy Name Hospital, Teaneck. Dr. Goldberg served in the U.S. Navy during World War II. Dr. Goldberg was a member of the American Medical Association and of our Bergen County component, and was a fellow of the American Academy of Neurology.

Jamie Martinez. Word has been received of the death of Jamie Martinez, MD, on July 17, 1990, at the age of 66. Born in Bogota, Colombia, in 1924, Dr. Martinez received his medical degree from the National University of Colombia, Bogota, Colombia, in 1952. Dr. Martinez emigrated to the United States in 1949. He served an internship and residency at General Hospital Center at Passaic, and a residency in surgery at Mount Sinai Medical Center, New York. An emergency room general surgeon specializing in abdominal surgery, Dr. Martinez was affiliated with General Hospital Center at Passaic; Beth Israel Hospital, Passaic; and Pascack Valley Hospital, Westwood. Dr. Martinez maintained a private practice in Passaic and Fair Lawn. He was employed by the Riverfront State Prison, Camden, as an assistant medical director. Dr. Martinez served in the United States Army Medical Corps during the Korean War, stationed at Gorgas Hospital, Panama. Dr. Martinez was a member of our Passaic County component and a fellow of the Association of Military Surgeons U.S., and of the American Society of Abdominal Surgeons.

Jacob A. Riese. A physician of geriatrics and a resident of Teaneck, Jacob Atkin Riese, MD, died on May 14, 1990, at the age of 85. Born in New York City on August 6, 1904, Dr. Riese attended the University of Pennsylvania School of Medicine, Philadelphia, earning his medical degree in 1928. In 1930, Dr. Riese received his New Jersey medical license. Retired for almost ten years, Dr. Riese maintained a practice in New York City and Jersey City, and was affiliated with several hospitals: Jersey City Medical Center; the former North Hudson Hospital, Weehawken; St. Francis Hospital, Jersey City; St. Mary Hospital, Hoboken; Holy Name Hospital, Teaneck; B.S. Pollack Hospital, Jersey City; Christ Hospital, Jersey City; and Jewish Hospital and Rehabilitation Center, Jersey City. Dr. Riese was a member of our Hudson County component and of the American Medical Association, and a fellow of the International Academy of Proctology and of the American College of Gastroenterology.

Edwin R. Rosner. After a lengthy illness, Edwin R. Rosner, MD, died on August 3, 1990, at the age of 81. Born in Vienna, Austria, on October 3, 1908, Dr. Rosner earned his medical degree from the University of Vienna, Austria, in 1934, and practiced obstetrics and gynecology in Austria for several years before immigrating to the United States in 1939 and earning his New Jersey medical license in 1943. Dr. Rosner interned at West Jersey Hospital, Camden. Specializing in medical hypnosis, Dr. Rosner had a practice in Haddonfield and Collingswood and was affiliated with West Jersey Hospital, Camden. Dr. Rosner was a member of our Camden County component and of the American Medical Association, and a fellow of the American Academy of Family Practice. He served on the advisory committee of general practice of the Medical Society of New Jersey, and as president of the New Jersey Academy of General Practice in 1953. Dr. Rosner was an Army captain with the 391st Battalion from 1944 to 1945.

Nelson W. Sisson. On August 7, 1990, Nelson White Sisson, MD, died at the age of 90. Born on December 31, 1899, in Peaksville, Virginia, Dr. Sisson received his medical degree from the University of Virginia School of Medicine, in 1924. Dr. Sisson earned his New Jersey medical license in 1933. He served an internship at The Hospital Center at Orange and a residency at St. Luke's Hospital and at Bellevue Hospital, both in New York. Dr. Sisson was a school physician at Mohonk School of Boys, Lake Mohonk, New York, for one year. Dr. Sisson had a practice in East Orange and was affiliated with Bellevue Hospital, The Hospital Center at Orange, and Veterans Administration Medical Center, Lyons. From 1933 to 1957, Dr. Sisson was a professor of otolaryngology at New York University School of Medicine. After retiring to Virginia from his private practice in 1966, Dr. Sisson served on the medical staff at E.I. DuPont, Waynesboro, Virginia, until 1970. Dr. Sisson was a member of the American Medical Association, and of our Essex County component, and a diplomate of the Board of Otolaryngology, and a fellow of the American College of Surgeons. Dr. Sisson's gift trust funds the Nelson W. Sisson Eminent Scholars Professorship in Otolaryngology and the Nelson W. Sisson Medical Scholarship Endowment Fund at the University of Virginia School of Medicine. Dr. Sisson served in the United States Infantry during World War I.

David H. Welsh. Panther Valley community resident, David Harrison Welsh, MD, died August 18, 1990, at the age of 66. Born in Morristown on April 5, 1924, Dr. Welsh received his medical degree from Temple University School of Medicine, Philadelphia, in 1949 and his New Jersey medical license in 1952. Dr. Welsh served his residency at Allegheny General Hospital, Pittsburgh, Pennsylvania. An anesthesiologist at Newton Memorial Hospital, Dr. Welsh served as chief of anesthesiology and as president of the medical staff and as a member of the Board of Governors. In addition, Dr. Welsh was a member of the Newton Board of Health. Dr. Welsh was a member of our Sussex County component and of the American Medical Association, and a past-president of the Sussex County Heart Association, and a fellow of the American College of Anesthesiologists. Dr. Welsh served in the United States Navy from 1944 to 1945. Dr. Welsh retired in 1985.

EDITORIAL CRITERIA

NEW JERSEY MEDICINE is the official organ of the Medical Society of New Jersey. All material published is copyrighted by the Medical Society of New Jersey.

Content. The educational content of each issue appears as scientific articles, based on research, original concepts relative to epidemiology of disease, and treatment methodology; case reports; review articles; clinical notes; and special articles, which include evaluations, policy and position papers, and reviews of nonscientific subjects. Other topics include commentary (critical narration); medical history; therapeutic drug information; pediatric briefs; nutrition update; and opinions. Editorials are prepared by the editor and by guest contributors on timely and relevant subjects. The Doctors' Notebook section contains organizational, informational, and administrative items from MSNJ and from the community. Letters to the editor and book reviews are welcome and will be published as space permits. The principal aim in the preparation of a contribution should be relevant to diagnosis and treatment and to education of patients and professionals. Preference will be given to professional authors from New Jersey and to out-of-state lecturers who submit a suitable manuscript based on a presentation made to an audience in New Jersey.

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Specifications. Submit two manuscripts that must be typewritten and double-spaced on 8½" by 11" paper. Statistical methods should be identified.

Authors are asked to seek clarity, accuracy, and originality; attention to details of grammar, spelling, and typing are important.

The title page should include the full name, degrees, and affiliations of all authors, and the name and address of the author to whom reprint requests and correspondence should be sent.

The author should submit a 30-word abstract.

Illustrations should be professional quality, black-and-white glossy prints. The name of the author, figure number, and the top of the figure should be noted on a label attached to the back of each illustration. Where photographs of patients are used, the subjects should not be identifiable or publication permission, signed by the subject or responsible person, must be included with the photograph. Material taken from other publications must give credit to the source; written permission must be submitted.

Generic names should be used with proprietary names indicated parenthetically or as a footnote with the first use of the generic name. Proprietary names of devices should be indicated by the registration symbol—®.

References should not exceed 35 citations except in review articles, and should be cited consecutively by numbers in parentheses at the end of the sentence. The reference list should be typewritten and double-spaced on separate 8½" by 11" sheets in numerical order. The style of *NEW JERSEY MEDICINE* for references is that of *Index Medicus:*

1. Goldwyn RM: Subcutaneous mastectomy. *NJ MED* 74:1050-1052, 1977.

2. Dixon WJ, Massey FJ: *Introduction to Statistical Analysis.* New York, NY, McGraw-Hill, 1969, pp. 42-48.

Publication Policy. Receipt of each manuscript will be acknowledged; the paper will be referred to the Editorial Board. The final decision is reserved for the editor. No direct contact beween the reviewers and the authors will be permitted, but authors will be informed of the reviewers' comments. Galley proofs will be submitted to the author for correction.

Reprint Orders. Reprints may be ordered after the author is notified that the article has been selected for a specific issue. A check for the cost of reprints must accompany that order.

Communications. All communications should be sent to the editor, *NEW JERSEY MEDICINE,* MSNJ, 2 Princess Road, Lawrenceville, NJ 08648.

NEWSWATCH

NO-FAULT PIP SCHEDULE

On November 26, 1990, acting under the imminent peril provisions of the Administrative Procedure Act, the Administration adopted a PIP medical fee schedule (automobile no-fault) to be effective January 1, 1991. MSNJ attorneys will request the courts to grant an injunction against the no-fault automobile fee schedule in early December. The Society has mailed copies of the schedule to hospital medical staffs, county societies, and specialty societies for review. Meanwhile, litigation against the no-fault law continues. The Tax Court has bifurcated the issues. Trial on the $100-a-year physician licensing tax has been completed and a decision is expected shortly.

MEDICARE MANDATORY ASSIGNMENT

Assemblyman James E. McGreevey (D-Middlesex) has announced he will move all out to pursue mandatory Medicare assignment. All physicians opposed to that legislation should call and write their assemblymen to express such opposition. Mr. McGreevey may be contacted at his legislative office located at 1000 Route 9, Woodbridge, NJ 07095.

WHEN YOUR HMO RUNS OUT OF MONEY

There is no question that the country is heading into hard times: the real estate market has dried up; the savings and loan industry is foundering despite government bailout attempts; and prices on everything from milk to heating oil are sky high and climbing. No doubt some of our readers already are feeling this economic pinch.

HMOs, the brainchild of the 1970s, that promised members the benefits of the best health care system in the world on a prepaid basis, also are feeling the pinch. Although some HMOs are efficiently run and economically sound, others are scrambling to survive. In the last two years, we have seen: the bankruptcy of Maxicare, a major California-based national HMO; the liquidation of Foundation Health Plan, a New Jersey subsidiary of another California HMO; the sale by John Hancock Mutual Life Insurance of all its HMO plans nationwide; and the insolvency of Omnicare/The HMO, Inc. (1)

Needless to say, these events may make physicians who are contracted with HMOs feel somewhat insecure. Are you obligated to continue providing services to HMO subscribers after it is clear that the HMO no longer can pay for those services? If you have rendered services prior to the insolvency that have not yet been paid, will you get paid, and if so, how?

The simple answer is, there is no simple answer. Various HMO provider contracts contain different provisions (or no provisions at all) to deal with these "unlikely" eventualities. This writer always has insisted that insolvency insurance be carried by the HMO, and that a requirement to provide proof of such insurance be contained in our clients' contracts. HMOs, of course, would rather not incur the expense of such insurance, and oppose this requirement vigorously.

The bankruptcy courts may consider HMO provider contracts executory, i.e. contracts that may be specifically assumed or rejected by the bankruptcy trustee. In the latter case, the contract is terminated. In the event the trustee assumes the executory contract, the contractor-physician would be bound to continue providing services, but would have a superpriority claim to assets of the bankrupt estate for services rendered after the assumption.

Of primary importance, however, is an understanding that your professional relationship with the patient is not necessarily dependent upon the contract with the HMO or payment thereunder. You still may be obligated to continue treating the HMO patients, and may not simply abandon them because their payment source has dried up. The old, tried and true requirements of reasonable notice and sufficient opportunity to find alternative care still apply before you may terminate a patient relationship. What is reasonable and sufficient? That determination will vary from case to case, depending upon the patient's condition, the availability of other physicians, and other factors.

For these reasons, it is important to anticipate the possible economic failure of the HMO at the time you enter into or renew your provider agreement. Insolvency insurance may assure that you will continue to be paid in the event of an insolvency, and should always be a nonnegotiable term of an HMO provider contract. Other precautions may be taken as well; but remember that, if your HMO becomes insolvent, your professional responsibilities to the patients are not necessarily altered by that event. William P. Isele

1. A public notice was published in the October 18, 1990, issue of New Jersey Law Journal, informing subscribers and creditors of Omnicare/The HMO, Inc. that liquidation of the HMO had been ordered by the Superior Court of New Jersey, and approved by the U.S. Bankruptcy Court. All persons with claims against Omnicare for services rendered prior to September 25, 1990, must file a proof of claim form and signed affidavit, together with supporting documentation, no later than January 31, 1991, or they will be forever barred from asserting such claims.

MSNJ NEWSLETTER

PROFESSIONAL CONDUCT

Two papers were submitted to *NEW JERSEY MEDICINE,* almost simultaneously, on similar topics. The topics—professional conduct and professional regulations—are timely and important. The emphases vary. We, therefore, publish both articles for your edification: "Professional Review and Regulations," page 983 and "Professional Medical Conduct Reform Act," page 989.

GROWING HEALTH CARE CRISIS

Governor James Florio joined with six governors to warn that state governments must develop comprehensive plans to meet the health care crisis. Governor Florio, in a National Governors Association press conference, said that states should not wait for federal help in devising solutions to health care problems. "The federal government doesn't appear to be headed that way, so the states really have no choice but to come up with their own strategies," Governor Florio said.

HERNIA PROCEDURES

Negotiations with Pennsylvania Blue Shield in connection with assistants at hernia procedures still are incomplete and are on hold. Targeted are assistant fees. It is the intent of HCFA to deny payment to those procedures where, nationally, assistants were used in less than 5 percent of cases. If herniorrhaphy falls into this group, further negotiations with Pennsylvania Blue Shield would be redundant. Please note an excerpt from a letter from Joseph Ricci: "Nevertheless, with regard to the hernia codes, and as you are well aware, all strangulated and incarcerated hernias are eligible for reimbursement. The codes specifically addressing strangulated and/or incarcerated hernias address only inguinal hernias. Therefore, for any strangulated and/or incarcerated hernias not inguinal in origin, surgeons in New Jersey may report the not otherwise classified code (NOC) which is 49999. You had requested the establishment of a precertification process for those hernias associated with unusual medical circumstances. Preauthorization processes are not usually part of the

PRESIDENT'S MESSAGE

Douglas M. Costabile, MD

The time has come for physicians to join forces. We need to protect our turf, not to be divided and conquered.

Physicians need to be politically minded. And now is the time to act—to give input to our legislators.

Next year Assembly and Senate members will be running for election. JEMPAC and MEDAC will need your contributions. JEMPAC will accept a personal check and MEDAC will accept a corporate check. Remember: money talks and we need representatives in government that will listen to and evaluate our concerns. Write that $100 check now. Your future is at stake. The Medical Society of New Jersey and the AMA have been working on your behalf at the state and national levels—and we want to continue the work.

Medicare Part B Program. Given the fact that provisions cannot be made for such a program for those hernias associated with unusual medical circumstances, the appropriate code should be reported along with modifier 22. The addition of modifier 22 will cause a suspension and review of the submitted surgical claim. If unusual circumstances prevail, reimbursement will follow." This may be interpreted as follows: For any complicated hernia, other than inguinal hernia, an NOC code should be used. This automatically will allow for an assistant's fee. In cases where, in the surgeon's best clinical judgment, a hernia repair is otherwise complicated and requires a surgical assistant, provisions for payment to the assistant is allowed. In order to insure payment for the assistant's fee, the operative record should document clearly the need for an assistant, and the appropriate code should be reported with a modifier. It is my impression that cases falling into this category would be large or direct hernias where a mesh repair is used. ☐ Ian D. Samson, MD

MEDICARE HOTLINE

A new Medicare hotline has been introduced in New Jersey to answer senior citizens' questions about new Medicare reimbursement and filing rules. The toll-free number is 800/648-6847, and is open from 9:30 AM to 12 noon, five days a week.

MANDATORY MEDICARE ASSIGNMENT

The following letter was sent to Governor Florio from Bessie M. Sullivan, MD, president of the Union County Medical Society:

I am writing in response to the article that was in this morning's *The Star-Ledger* regarding the report of your Health Care Commission and the remarks attributed to you, namely, "Senior citizens are facing the problem of runaway health costs because there are no controls on how much above Medicare rates doctors can charge." This statement is patently untrue.

If your Commission studied the issue for six months, they must be conversant with the MAAC, the Maximum Allowable Actual Charge that nonparticipating physicians are by federal law not allowed to charge above for Medicare patients. Each physician has an individual MAAC that is based on charges accumulated from the previous year, except in 1986 when they were introduced and MAACs were based on the period April-June 1984. If a procedure was not done the previous year, the physician is bound by Medicare's determination. New physicians in practice when the MAAC first came out in 1986 were allowed to charge only 50 percent of the prevailing rate. MAACs have not been allowed to go up more than 1½ percent each year and usually less. Additionally, most physicians (over 70 percent nationwide) voluntarily froze their Medicare fees in 1983 at the request of the AMA, so when the MAACs came in, they were based on these already frozen fees.

If your Commission was entrusted with reviewing health care in New Jersey, we would assume that they had access to and reviewed HCFA regulations regarding physicians' fees. We are, therefore, at a loss to understand how they reached the conclusion that physicians' fees for Medicare patients are not capped when in fact physicians' fees are closely monitored by the federal government. We are concerned that this misinformation is being distributed to newspapers, which is neither in the best interest of senior citizens nor the physicians treating these patients.

We would be remiss if we did not mention that there is a statewide Senior Citizen Medical Courtesy program wherein physicians voluntarily accept assignment on seniors, and that over 70 percent of Medicare claims in New Jersey are submitted on an assigned basis, nonparticipating physicians accepting Medicare's allowance as payment in full, rather than billing according to their MAACs.

AMA CALLS FOR KUSSEROW DISMISSAL

The American Medical Association has called upon President George Bush to seek the resignation of Richard Kusserow, the Inspector General of the Department of Health and Human Services, because of lack of trust and confidence among U.S. physicians. The AMA acted after a program televised on ABC-TV's "Prime Time," that showed Mr. Kusserow to be reckless and wholly lacking in candor and impartiality. "Mr. Kusserow has for nine years presided over the process in which the Department of Health and Human Services investigates, judges, and sanctions physicians in the Medicare program who are accused of substandard care or fraudulent billing practices."

Dr. James S. Todd's comments mirrored those of a letter sent to President George Bush by Joseph T. Painter, MD, chairman of the AMA Board of Trustees. "In that role he has been zealous in his determination to find and punish physicians who are substandard and who abuse the program. We want them out of the program—and the profession—every bit as much as the government wants them out," Dr. Todd said.

"While carrying out his duties, Mr. Kusserow is widely perceived to have ignored, indeed fought against, principles of fairness which are routine in the American administrative and judicial system. As a result, many competent and honest physicians have been severely and improperly damaged and many more have been unnecessarily harassed."

DISPOSAL OF RADIOACTIVE WASTE

The disposal of low-level radioactive wastes may seem like a minor concern among medicine's worries. But consider these facts: Twenty-five to 30 percent of all low-level radioactive wastes produced in the United States result directly from medical uses. About 120 million nuclear medicine procedures contribute annually to low-level radioactive waste production. Research is a significant contributor to low-level radioactive waste production. For example, radioisotopes are used in the development and evaluation of about 90 percent of all new drugs. Universities, medical schools, hospitals, laboratories, and medical practices are among the producers of low-level radioactive wastes. Their activities clearly benefit individual patients and society as a whole.

Then why is disposal of radioactive wastes a problem? In response, Congress passed the Low-Level Radioactive Wastes Policy Act in 1980. Under this bill, each state would eventually become responsible for disposal of radioactive wastes generated within its boundaries. The act recommended that states participate in regional groupings or compacts to improve the cost effectiveness of disposal facilities. It also stated that any regional facility could exclude wastes from outside its region after January 1, 1986.

Physicians can play a key role in helping their states develop acceptable disposal facilities for low-level radioactive wastes. Their medical training can provide an informed perspective on the personal and public health risks related to waste disposal. But more importantly, they can describe the beneficial uses of procedures that produce radioactive wastes and how these uses will be compromised if disposal sites for the wastes are unavailable.

Consider becoming involved in efforts to establish disposal facilities. First, contact representatives of your state's radiation control program or health agency. Arrange to meet with them, determine whether your state is involved in a compact, and offer your support. Encourage these representatives to consider what will be done if a disposal site is not available by January 1, 1993. Stress the need to develop one or more storage sites for low-level wastes as an intermediate measure until a disposal site becomes available.

Secondly, encourage your medical society's public health or environmental health committee to become involved. Pass policy regarding the disposal of low-level radioactive wastes and then promote it. Through lobbying efforts or by working with public health authorities, the medical society can influence disposal facility plans.

Finally, physicians can help persuade their patients, the media, and community groups that radioactive materials can be beneficial. Seek opportunities to lead discussions in classrooms or speak to public audiences.

CALL FOR PAPERS: SPECIAL ISSUE ON COMPUTERS

NEW JERSEY MEDICINE invites interested persons to submit articles or suggestions for a special issue on Computers in Medicine to be published in spring 1991. Under the guest editorship of Richard M. Ball, MD, this special issue will cover a variety of topics directed toward computer use by the physician. Specific topics for articles might include: medical infomatics; getting physicians to use computers; experiences using on-line medical databases; drug interaction programs; coding software; radiologic imaging; computer-assisted learning and testing; computer-stored medical records; doctors as programmers; and personal experiences with office business computer systems. Please send your inquiries or manuscripts to Richard M. Ball, MD, 1907 Park Avenue, South Plainfield, NJ 07080.

PHYSICIAN OFFICE LABORATORY

Kathleen Voldish, CLA (ASCP), is available to present a program to physicians entitled "How To Prepare Your Physician Office Laboratory for CLIA-88 Regulations." The one-hour program can be presented by calling 609/428-8414.

The controversy over the upcoming Clinical Laboratory Improvement Act Amendments (CLIA-88) continues. CLIA-88 will federally regulate all physician office laboratories. Numerous comments were received by the Health Care Financing Administration (HCFA) concerning the expansion of Level I tests, relaxing the physician director requirements in Level II, and linking the personnel requirements to test complexity in Level II.

Presentations are being made concerning equivalent routes for both office laboratory personnel and physicians to meet the requirements found in Level II. A competency examination plus experience is hoped to be a possible solution.

The New Jersey State Department of Health has been working on regulations similar to CLIA-88 to regulate office laboratories. If the state's requirements are equal to or greater than those of CLIA, the state would be given jurisdiction over regulating POLs. The state regulations could possibly be implemented before CLIA-88 regulations are finalized.

Physicians must start preparing office laboratories now to be prepared for upcoming regulations.

FINI

"Don't get too big for your britches—you're sure to be exposed in the end."

PROFESSIONAL LIABILITY

LIABILITY IN COSTLY AIDS CASES EXPANDS RAPIDLY AS ATTORNEYS TARGET PHYSICIANS AND HOSPITALS

Brace for a barrage of new AIDS liability cases, warns an attorney who has become a specialist in this area. Duncan Barr, of San Francisco, said that although the first AIDS malpractice cases to reach the courts were directed against blood banks, trial lawyers now routinely include physicians, hospitals, and medical groups in their complaints. The tendency of the blood banks to settle such cases early "often leaves the doctors and hospitals out there by themselves," said Barr, who is with the firm of O'Connor, Cohn, Dillon and Barr.

Look at just two AIDS cases in which juries levied huge awards against physicians and hospitals and the prospects of what lies ahead become clear. Last June, an Arizona jury awarded $28.7 million to five-year-old Alex Edwards who contracted AIDS from a blood transfusion given shortly after his birth. On the hook for the huge amount were neonatologist Abraham Kuruvilla, MD, and the clinic with which he is associated, Neonatology Associates of Phoenix. Dr. Robert Crawford, president of Mutual Insurance Company of Arizona (MICA), the company insuring Dr. Kuruvilla, said: "A verdict of $28.7 million was rendered against the doctor and the group because of the doctor's actions in trying to save the life of Alex Edwards when he was two days old. MICA stated then, as we do now, that the doctor met the standard of care. The jury obviously did not agree. We feel their decision was an emotional one stemming from confusion, anger, and fear of the AIDS disease rather than the facts of the medical treatment." MICA successfully negotiated an out-of-court agreement with the Edwards family last month "to resolve the litigation in the best interests of both the family and the doctor," Dr. Crawford said. The agreement is for payment of approximately $6 million with a structured plan to provide lifetime medical care to the Edwards boy. The settlement has been approved by the court, Dr. Crawford said. In the Edwards case, Blood Systems, Inc., a parent of United Blood Service of Arizona and Samaritan Health Services also were named as defendants. Both settled and were dismissed from the case in February, leaving Dr. Kuruvilla as the remaining defendant. Although the Edwards case has been resolved, a second almost identical case involving a baby girl born on the same day as Alex at the same hospital who also received blood containing the HIV virus also is pending in Arizona. Blood Services Inc. of Scottsdale and Samaritan Health Services Inc. of Phoenix were named as defendants along with Dr. Kuruvilla and Neonatology Associates and two other laboratories, but the physicians, his medical group, and the laboratories quickly were dismissed with apologies from the trial lawyer for improperly naming them.

In a second case, a Columbus, Ohio woman who contracted the AIDS virus from a blood transfusion given after breast reduction surgery won a $12 million verdict against Dr. John T. Cozzone and Mount Carmel Medical Center last March. Holly Sutro Lalonde, 25, also named the American Red Cross and its central Ohio chapter, Ohio Plastic Surgeons, and another physician, Dr. Gerald A. Drabyn. However, the plaintiffs, Lalonde and her mother, dismissed Ohio Plastic Surgeons and Dr. Drabyn. The Red Cross settled out of court for an undisclosed amount. The Columbus woman's case centered upon her arguments that the transfusion was unwarranted and ordered without permission from her physician, Dr. Drabyn, who assisted at the surgery, and that the hospital was negligent in screening and selling its products. As has often been the case in the first wave of transfusion suits, Lalonde was a patient who received AIDS-tainted blood just before full blood screening procedures were in place. According to *Columbus Dispatch,* the Red Cross received testing kits for the virus March 7, 1985, and had begun phase-in testing by March 18, one week before Lalonde's surgery.

The Edwards and Lalonde cases may be chilling indicators of what the health care community will be up against in the near future. Just look at the number of potential cases. An estimated 26 million people received transfusions between 1977 and 1985, the years when the AIDS epidemic was building fast. It was not until 1985 that tests to screen blood for the virus were approved and used.

"If nothing else, AIDS has brought a greater awareness of the risk of transfusion home to doctors," said Barr. "Transfusion carries an inherent danger. No transfusion should be given lightly. If a transfusion is necessary, a full explanation (of the reasons, risks, and alternatives) should be given to the patient."

Barr, who successfully has defended San Francisco's Irwin Memorial Blood Bank in several cases, says that physicians who transfuse only when medically indicated and who give full explanations during the process of obtaining informed consent are "in good shape" even in those instances in which blood does prove later to have been contaminated with the HIV virus.

Now that blood screening procedures are in place, risks of transfusing infected blood are diminished but not completely. Some say the chance of getting AIDS from a blood transfusion today are as low as 1 in 500,000 but others put it at 1 in 50,000. Government statistics show only 12 AIDS cases that reportedly were contracted through transfusions since blood screening procedures were begun in 1985.

"I have tried 7 of 15 such cases against blood banks and I am convinced that a jury can be made to understand that there was a time period when people did not know about AIDS and did not know how to test blood for the virus. I think these cases can be won. The problem is that people have a great deal of sympathy for AIDS patients and they let their emotions run away with them when making awards."

Barr said he recently obtained a summary judgment in a case in which three small boys in one family—all hemophiliacs—had contracted the AIDS virus through contaminated blood products. "It was a tragic case. But in such cases, nobody wins. The judge said to the family, 'Sorry, you don't have a case here.' But the blood bank(s) did not do anything wrong."

Barr suggested that federal solutions may be needed to help underwrite the costs of care of such victims. He cited the vaccine compensation program and the compensaton program for victims of black lung disease as examples. "Blood banks cannot absorb the full social responsibility," he said. "They just don't have enough money."

Barr predicts that in 1991 some blood banks will declare bankruptcy in the wake of adverse judgments arising from AIDS suits. "One such verdict can bankrupt a blood bank," he said.

That is why blood banks increasingly are settling with plaintiffs and letting much of the liability in AIDS cases flow through to physicians and hospitals—a trend Barr thinks will continue. (Reprinted from *Medical Liability Monitor,* Winnetka, IL, Volume 15, Number 9, September 28, 1990.)

PROPER CARE NEEDED TO AVOID SEXUAL MISCONDUCT CHARGES

Patient complaints of sexual misconduct by physicians are the most sensitive and difficult cases the Board investigates. The incidents rarely are witnessed. Allegations of sexual misconduct are particularly difficult to prove, and can lead to public humiliation for both the patient and the physician involved.

In order to prevent misunderstandings and protect physicians and patients from allegations of sexual misconduct during physical examinations, the Board offers the following guidelines:

1. Maintaining patient dignity should be foremost in the physician's mind when undertaking a physical examination. The patient should be assured of adequate auditory and visual privacy, and should never be asked to disrobe in the physician's immediate presence. Examining rooms should be safe, clean, and well maintained, and equipped with appropriate furniture. Gowns, sheets, and/or other appropriate apparel should be made available to protect patient dignity while promoting a thorough and professional examination.

2. A third party should be readily available at all times during a physical examination. It is suggested that the third party actually be present when the physician performs an examination of the sexual and reproductive organs or rectum. It is incumbent upon the physician to inform the patient of the option to have a third party present. This precaution is essential regardless of physician/patient gender.

3. The physician should individualize his approach to physical examinations so that the patient's apprehension, fear, and embarrassment are diminished as much as possible. An explanation of the necessity of a complete physical examination, the components of that examination, and the purpose of disrobing may be necessary in order to minimize the patient's apprehension and possible misunderstanding.

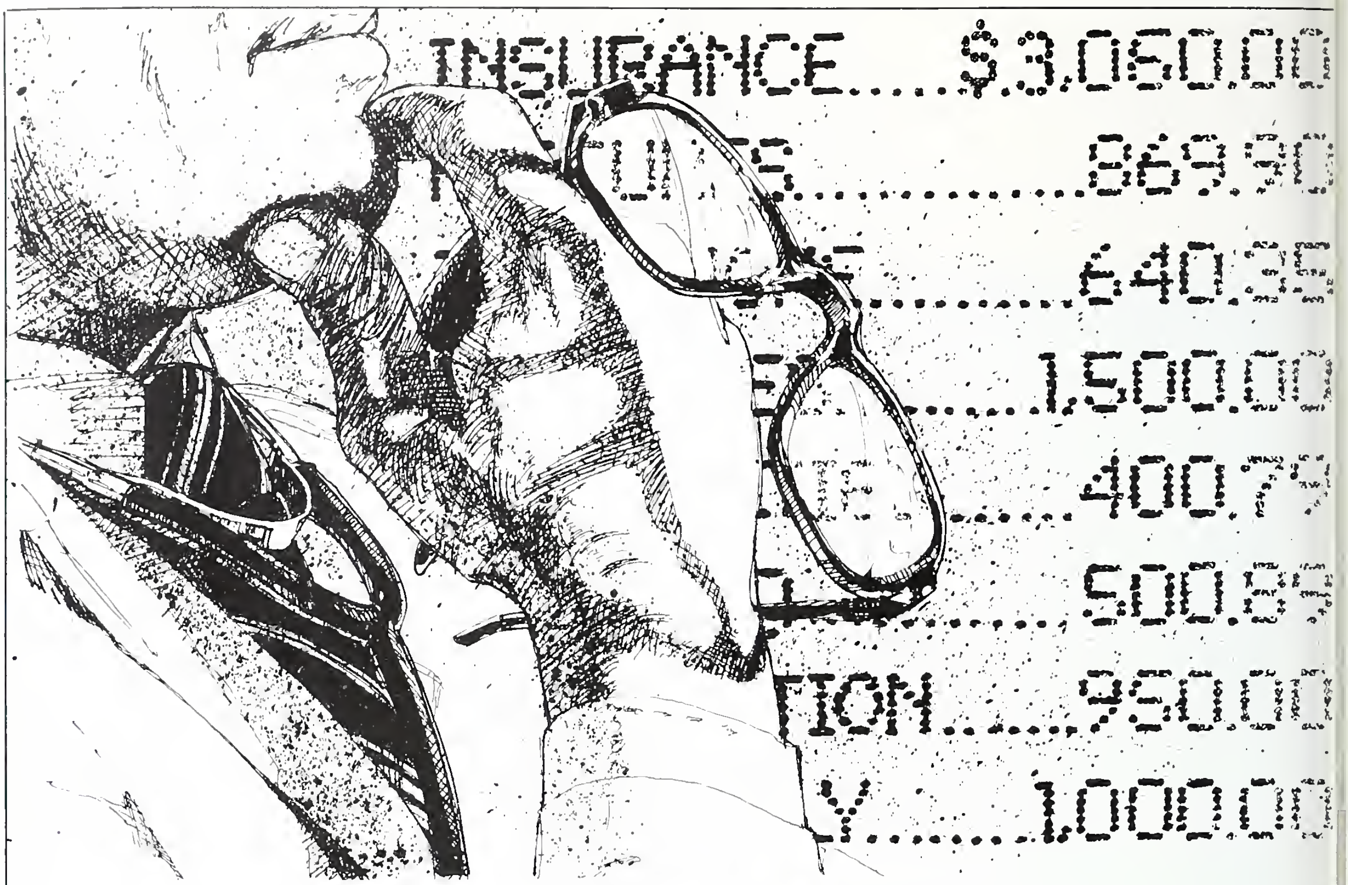
4. The physician and his staff should exercise the same degree of professionalism and caution when performing diagnostic procedures, i.e. electrocardiograms, electromyograms, endoscopic procedures, radiological studies, as well as surgical procedures and postsurgical followup examinations when the patient is in varying stages of consciousness.

5. The physician should be alert to suggestive or flirtatious behavior or mannerisms on the part of the patient, and should not put himself in a compromising position.

6. The physician shall not exploit the physician/patient relationship for sexual or any other purposes. Moreover, such an allegation against a physician constitutes grounds for investigation on the basis of alleged unethical behavior. (Reprinted with permission from the Ohio State Medical Board and the Kentucky Board of Medical Licensure.)

PROFESSIONAL LIABILITY

James E. George, MD, JD, is the director of the Department of Professional Liability Control, and A. Ronald Rouse is director of special projects, MSNJ. If you have questions, please call 609/896-1766.



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EDITOR'S DESK

DECEMBER 1990

As I was writing this editorial, my thoughts turned to Thanksgiving, the unique North American celebration that unites turkey and family, highlights cranberries and pumpkins, and intensifies the preparations for the end-of-the-year holiday season. While other years have emphasized shopping, this year should emphasize family.

The tens of thousands of American military personnel in the Middle East are isolated from home and family. They do not know which to fear more—boredom or Iraqi firepower—in a culture and climate totally foreign to them. The ties to loved ones have been stretched to the limit.

Traditionally, December, in the past, has not produced peaceful actions or cessation of hostilities, a lessening of tensions, or an increase in the spirit of brotherhood between warring nations. Hanukkah celebrates the victory of the Maccabees over Antiochus IV and the Syrians. Washington led a secret crossing of the Delaware against the Hessians. The Germans produced their last major offensive during World War II at the Battle of the Bulge. The Chinese push at Christmas time in Korea is well documented. And, let us remember Pearl Harbor.

The opposition of the nations of the world to the Iraqi invasion of Kuwait is an unparalleled, near-unanimous response, making allies not seen before in the history of the United Nations. The position of the United States, supported by most of the rest of the world, deserves support by all its citizenry. The protestors of today are not like those of a dozen years ago; they are more like the American Firsters of depression days, the ultra-isolationists of that era. They should be politely ignored. It is in our better interest to be supportive, not just to the policies of our government, but more particularly to our military and to the families they left behind—especially during what should be a joyous time of year.

In December 1776, Thomas Paine wrote, "These are the times that try men's souls," and "The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of his country; but he that stands it now deserves the love and thanks of man and woman." Are we to be sunshine patriots? Are we too sophisticated to honor God, family, and country?

Happy holidays to you all. ☐

GUEST EDITORIAL: MATERNAL MORTALITY

We are grateful to the dedicated members of the Subcommittee on Maternal Mortality who have volunteered their time to review the 50 or 60 charts of pregnant women who die every year in New Jersey. Trying to explain these tragedies often is thwarted by hospital records that are difficult to read and carelessly written, with little or no effort to provide an intelligible narrative of what took place. This arduous task of studying the causes of maternal deaths is rewarded only by the satisfaction that the information gathered and analyzed may possibly serve to prevent the recurrence of similar tragedies. Unfortunately, this satisfaction is tempered if not actually diminished by the sad realization that many of the physicians directly or indirectly involved may have learned little or nothing from these events because most hospitals fail to conduct meaningful discussions of maternal deaths. The obvious question arises: how and why do hospital administrators, chiefs of departments of obstetrics, medical society officers, and health department officials allow this situation to continue? Suggestions by the MSNJ Subcommitteee on Maternal Mortality have been ignored. Decreases in the new state budget will mean a decrease in the already meager surveillance by the New Jersey State Department of Health. Are we waiting for militant citizens to picket our hospitals or place advertisements in our local newspapers?

The time has come for physician leadership. Every department of obstetrics must have in place a protocol to be followed in the event of a maternal death. There remains one effective remedy that the Committee can prescribe to insure prompt action—the inclusion in future annual reports of maternal mortality of the names of those hospitals where formal discussions of maternal deaths fail to take place. Never before has the old quotation been more pertinent: "Those who do not learn from history are doomed to repeat it." ☐ Jerome Abrams, MD, MPH

BOOK REVIEWS

ANNUAL REVIEW OF MEDICINE

Annual Reviews, Inc., Palo Alto, CA, 1990. This year's *Annual Review of Medicine* contains 46 different subjects related to the clinical sciences and research topics. The practicing physician will enjoy reading papers that are authoritatively written with a large number of references, and reviewing black-and-white photographs and well-explained diagrams. The variety of topics ranges from the pathogenesis and treatment of acne to paroxysmal nocturnal hemoglobinuria. This excellent review should be on one's desk to be read whenever there is time, and certainly should be a necessary reference text. □ Geobel A. Marin, MD

ASTHMA AS AN INFLAMMATORY DISEASE

Paul M. O'Byrne (ed). Marcel Dekker, Inc., New York, NY, 1990. The therapy of asthma has changed markedly with the appreciation of asthma being an inflammatory disease. Emphasis has shifted to control the chronic inflammatory component, rather than the bronchospastic component, with avoidance and medications. This excellent and concise book addresses asthma as an inflammatory disease. By discussing the pathophysiology of inflammation in asthma, the book gives a clear rationale how controlling the inflammation, therefore, will better control the disease. The book discusses avoidance and elimination of inflammatory-inducing factors and gives strong emphasis on how to use medications to control inflammation. The role of allergy is discussed fully.

Since the book has only 312 pages, not all topics are covered completely. Clinicians may desire more information on the pharmacological management of asthma, both in the chronic and acute phases of the disease. The book contains many references and charts.

I strongly recommend this book as a handy reference to anyone who cares for asthmatic patients. It also is a fine introductory book for those not as current with the new emphasis in asthma therapy. Medical students will find this book helpful as it is easy to read. □ Harvey Weisslitz, MD

COMPREHENSIVE TEXTBOOK OF PSYCHIATRY

Harold A. Kaplan, MD, and Benjamin J. Sadock, MD. Baltimore, MD, Williams & Wilkins, 1989. The fifth edition of this massive textbook appears only four years after the previous one. It is not significantly larger but has been extensively rewritten and updated; 184 of the 237 contributors did not appear in the 1985 volume. The editors have attempted to produce "the most thorough, complete, integrated, and revised book of record of clinical psychiatry" and they have been successful in this undertaking. It contains much more than psychiatry; its early chapters are comprehensive but concise reviews of all aspects of neural science pertinent to psychiatry, from neuroanatomy to basic molecular genetic neuroscience. These chapters are followed by sections on neurology, psychology, sociocultural sciences, quantitative and experimental methods, theories of personality and psychopathology, and psychiatric interviewing. The contributors are outstanding scientists and clinicians and the editors have worked hard to make their contributions succinct yet lucid.

In an epilogue, Cancro states that the textbook was designed like a novel, beginning with the first page and ending with the last. Most readers will use this textbook for reference, and it probably is the best available single work for this purpose. Residents who read it from cover to cover will be prepared for Board examinations. ☐ A. Arthur Sugerman, MD

IMMUNOLOGY: 1930-1980: ESSAYS ON THE HISTORY OF IMMUNOLOGY

This text contains a collection of essays written by renowned individuals who have been instrumental in the development of major advances in the field of immunology over the past 50 years. This text is not to be taken as a history book, but does provide insights to the minds of some of the major investigators that have influenced the course of immunology as we know it today. ☐ Leonard Bielory, MD

INTRODUCTION TO MEDICAL IMMUNOLOGY

G. Virella, J. Goust, H. Fudenberg (eds). The text, one of a series of excellent volumes dedicated to one subject, is a thorough review of immunology. Though one might claim an overall similarity of immunology topics for this and other texts, the clarity of writing clearly places this book on a different level. In addition, the self-evaluation questions found at the end of the chapters are a superb method for novices interested in the field of immunology—to focus on the key points of each chapter. Thus, the text has a superb potential as acting as a text for medical students or other individuals interested in understanding the vast array of information that has been garnered under the title of "immunology." ☐ Leonard Bielory, MD

OXFORD TEXTBOOK OF PSYCHIATRY, SECOND EDITION

Michael Gelder, Dennis Gath, and Richard Mayou. New York, NY, Oxford Medical Publications, 1989. This textbook is intended primarily for psychiatric residents but also may be useful as a reference work for medical students. Practicing psychiatrists and other physicians may benefit from this concise and eminently readable volume. The authors are the chairmen of the Department of Psychiatry at Oxford University. Most of this up-to-date work is international in concept and well-balanced with regard to American and British usage. Just as the first edition (1983) used both the DSM III and ICD 9 classifications, the second edition uses DSM IIIR and ICD 10 (draft). The double classification is not available in any other textbook; it may be of great interest to some readers and a distraction to others. I can recommend this textbook as the best available for those who want a readable middle-sized book (just over 1,000 pages) presenting the practice of psychiatry as it is today. ☐ A. Arthur Sugerman, MD

TEXTBOOK OF INTERNAL MEDICINE

William N. Kelly, MD. J.B. Lippincott Company, Philadelphia, PA, 1989. Kelly's *Internal Medicine* is bound to become a favorite textbook among the classics in the group. This book is a gold mine of medical information compiled by some of the best known names in American medicine; it is written and printed so every chapter fully satisfies the need of the physician looking for information. There are no weaknesses here. I devoted my reviewing time to reading the sections on gastroenterology, infectious disease, and cardiology. I then reviewed the index and looked up entities such as ehrlichiosis and babesiosis and was gratified to see them clearly listed and indexed.

I am convinced this textbook will be a standard source of consultation, not only for the physicians who practice internal medicine, but also for the specialists who need to find a quick and authoritative source of information. I enjoyed browsing through this book and reading several of its chapters; I am certain I will refer to it frequently. I recommend it highly and expect to make it my standard textbook in internal medicine. ☐ Geobel A. Marin, MD

Professional Review and Regulations

JAMES E. GEORGE, MD, JD
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New federal and state legislation will subject physicians to increasing scrutiny in the 1990s. This article highlights these new laws and explores physician concerns about them.

Physician regulations and review of the quality of health care will take on a new dimension in the 1990s. The professional conduct of physicians will undergo increasing scrutiny as a result of new federal and state laws. The Health Care Quality Improvement Act, signed by former President Reagan in 1986, promotes professional review activities. It also sets standards for professional review actions and grants broad immunity to reviewers as an incentive and protection for physicians engaging in effective professional peer review. This same federal legislation also authorized the creation of the National Practitioner Data Bank to collect and release to eligible parties certain adverse information relating to the professional competence and conduct of physicians, dentists, and other health care providers.

New Jersey physicians also will be subject to the Professional Medical Conduct Reform Act of 1989

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(Act), signed into law by former Governor Kean on January 12, 1990. The new law strengthens the system for monitoring and disciplining physicians and podiatrists in this state and makes fundamental changes in the law governing physician review and discipline. This article highlights some important aspects of the new federal and state laws and explores physician concerns about them.

THE NATIONAL PRACTITIONER DATA BANK

Although the Health Care Quality Improvement Act (HCQIA) was enacted in 1986, federal regulations for the Data Bank were not published until October 1989. The regulations require hospitals, health care entities, boards of medical examiners, professional societies, individuals, and professional liability insurance companies to report certain adverse information to the National Practitioner Data Bank. The information includes adverse licensure actions, adverse actions regarding clinical privileges, professional society memberships, and payments resulting from settlement or judgments of malpractice claims and suits, including a description of the acts or omissions and injuries and illnesses or injuries upon which the suit or claim was based. However, the regulations provide that a payment in settlement of a malpractice suit or claim shall not be construed as creating a presumption that malpractice occurred.

HCQIA also requires a hospital to request information from the Data Bank whenever a physician applies for clinical privileges or a staff position. At least every two years hospitals also must request information from the Data Bank concerning each practitioner who maintains clinical or staff privileges (courtesy or otherwise) at the hospital.

The regulations also require that adverse information be reported promptly to the Data Bank. Malpractice payments and adverse licensure actions must be reported to the Data Bank within 30 days of payment or the date licensure action was taken. Hospital and health care entities must submit adverse actions to the New Jersey State Board of Medical Examiners (SBME) within 15 days from the date the adverse action was taken. SBME, in turn, must report such adverse information to the Data Bank within 15 days.

A "health care entity" is defined as any organization providing health care services and employing a formal peer review process to further qualify health care. A board of medical examiners in the state in which the reviewing health care entity is located must receive the following adverse actions by health care entities regarding clinical privileges: a) any professional review action that adversely affects the clinical privileges of a physician for more than 30 days; and b) the acceptance by a health care entity of the surrender of clinical privileges or any restriction of such privileges while the physician is under investigation by the health care entity relating to possible incompetence or improper professional conduct or the surrender of clinical privileges in return for not conducting such an investigation or proceeding.

Likewise, certain adverse actions taken by a state board of medical examiners must be reported to the National Practitioner Data Bank. Adverse actions are any actions based on reasons relating to professional competence or conduct that (a) revokes or suspends or otherwise restricts a physician's license; (b) censures, reprimands, or places a physician on probation; or (c) results in surrender of a physician's license.

The federal regulations also provide sanctions for failure to report. If payments made in settlements of malpractice suits or claims are not reported, civil monetary penalties of up to $10,000 for each such payment may be assessed. Where the secretary of Health and Human Services determines that a state board of medical examiners or health care entity has failed to submit a required report, the secretary will designate another qualified entity to make such reports.

Information reported to the Data Bank is confidential, but the regulations provide for limited disclosure. Hospitals must access the Data Bank whenever a physician applies for staff or clinical privileges and also must access the Data Bank every two years for information concerning any physician who has staff or clinical privileges. Hospitals may request access at any other time.

Under certain limited circumstances, Data Bank information may be made available to plaintiffs or their attorneys in medical malpractice cases. A plaintiff attorney (or plaintiff representing himself) who has filed a malpractice suit against a hospital, may request information about a specific physician, dentist, or other health care practitioner who also is named in the legal action. However, this information will be disclosed only upon the submission of evidence that the hospital failed to access the Data Bank as required by law concerning that physician. The federal regulations also provide a mechanism by that a physician may dispute Data Bank information concerning himself.

NJ PROFESSIONAL MEDICAL CONDUCT REFORM ACT OF 1989

This new state law significantly strengthens reporting requirements by health care facilities, HMOs, medical malpractice insurers, and health care practitioners. Qualified immunity also is provided to those required to report.

The new state law also authorized the establishment of a nine-member medical practitioner review panel, effective July 11, 1990. The panel's function is to "promptly" investigate information provided to it and to make recommendations and referrals to SBME. Eight members of the panel are appointed by the governor with the advice and consent of the Senate. Four physicians, three "consumers" of health care services, one hospital administrator, and one member of SBME, appointed by the Board president, shall serve on the panel.

The new law also created a position of fulltime medical director of SBME and provides for computerization of all Board operations. Increased licensing fees will fund the costs of the new Board positions and Panel.

Highlights of the Act are as follows: Criminal sanctions are provided under two sections of the law. Under Section 14 of the Act, a person who knowingly practices medicine or podiatry without a license is guilty of a crime of the third degree. Under Section 15 of the Act, a licensee is guilty of a crime of the fourth degree "if he purposefully destroys, alters, or falsifies any record relating to the care of a medical or surgical or podiatric patient in order to deceive or mislead any person as to information, including but not limited to a diagnosis, test, medication, treatment, or medical or psychological history, concerning the patient."

New Jersey classifies criminal offenses into four degrees for the purpose of sentencing. The maximum fine that can be imposed for either a third or fourth degree offense is $7,500 or any higher amount equal to double any monetary gain to the offender or loss to the "victim."

A person convicted of a third-degree crime may be sentenced to prison for a term between three and five years. For a fourth degree crime the term shall not exceed 18 months. Any of these sentences (imprisonment or fines) may be suspended at the discretion of the court.

The new law also contains a provision that requires practitioners to promptly notify SBME of "information which reasonably indicates another practitioner has demonstrated an impairment, gross incompetence or unprofessional conduct which would present an imminent danger to an individual patient or to the public health, safety or welfare." A practitioner who fails to notify the Board is subject to disciplinary action and civil penalties. However, no private right of action may be brought by a third party against a practitioner for failure to report. Also, a practitioner who gains such knowledge as a result of rendering treatment to the subject practitioner is exempt from reporting.

Practitioners, HMOs, and health care facilities that report to the Board are granted immunity for damages, so long as the reporting party has not knowingly provided false information.

Other new state reporting requirements mandate that health care facilities and HMOs notify the review panel of the following acts: a) voluntary resignation when the practitioner's conduct or patient care is being reviewed or an intention to do so has been expressed; b) voluntary relinquishment of any clinical privileges if the practitioner's conduct or patient care is being reviewed or an intention to do so has been expressed; c) summary or temporary suspension or revocation of privileges or discharge from the staff, as well as the termination of a professional services contract "for reasons relating to the practitioner's incompetency, misconduct or impairment"; d) voluntary agreement by the physician to the placement of conditions or limitations on the exercise of clinical privilege or practice within the health care facility or HMO; e) granting of a leave of absence from a health care facility or HMO if the reasons provided by the practitioner to support the leave relate to any physical, mental, or emotional condition or drug or alcohol use, that might impair the practitioner's ability to practice with reasonable skill and safety.

The new state law requires professional liability insurance carriers to report all medical malpractice settlements, judgments, and arbitration awards, regardless of dollar amounts, to the medical practitioner review panel. Insurers also are required to report any termination or denial of coverage to a practitioner or surcharge assessed on account of the practitioner's practice method or medical malpractice claims history. However, the review panel and the Board shall not presume that any judgment or award in a malpractice case is conclusive evidence in any disciplinary proceeding. The fact that a disputed claim or suit has been settled is not admissible in any disciplinary proceeding.

IMMUNITY FOR PEER REVIEW AND REPORTING

In enacting HCQIA, Congress identified and responded to an over-riding national need to provide incentive and protection for physicians engaging in effective professional peer review.

If a professional review action meets the standards specified in HCQIA, a broad grant of immunity from liability is provided to the reviewing body, all members or staff of the reviewing body, any person under contract or other formal agreement with the reviewing body, and any person who participates or assists the body with respect to any action, including persons who provide information to the reviewing body, whether witnesses or otherwise.

This broad grant of immunity protects against liability under virtually any federal and state law, with a few exceptions. Civil rights violations are not protected by immunity. Immunity under HCQIA does not extend to persons who knowingly provide false information to a professional review body.

To qualify for immunity under HCQIA, peer review actions must meet standards specified under Section 1112 of the Act. These include specific due process rights that must be afforded to the involved physician before any rights or interests can be interfered with or taken away. Fundamental fairness requirements of HCQIA mandate that peer review be done in good faith with the goal of improving the quality of health care. Immunity is removed where peer reviewers are in direct economic competition with the involved physician whose conduct is being reviewed. In addition, the involved physician must be given adequate notice of a hearing (30 days), the right to representation at the hearing, as well as the opportunity to present evidence and to call and cross examine witnesses. When review is conducted appropriately, the risk of liability is minimal.

The immunity granted by HCQIA is immunity from damages. The law does not prevent peer reviewers from being sued. However, another provision of HCQIA does provide an economic disincentive to reduce the chances of reviewers being sued by an aggrieved physician. An aggrieved physician who sues and loses may be required to pay the costs of the reviewers' defense, if the claim or conduct of the disgruntled physician during the litigation "was frivolous, unreasonable, without foundation or in bad faith."

The New Jersey law also provides a grant of immunity for peer review activities. The Professional Medical Conduct Reform Act of 1989 amends N.J.S.A. 2A:84A-22.10 and provides immunity for peer review activity taken without malice and in the reasonable belief after reasonable investigation that such action or recommendation is warranted upon the basis of the facts disclosed.

CONFIDENTIALITY

Information reported under HCQIA is considered confidential and civil monetary penalties of up to $10,000 may be assessed for each violation of confidentiality. The HCQIA confidentiality provisions do not apply to the original documents or records from which the reported information is contained.

Disclosure of information reported to HCQIA may lawfully occur under certain circumstances. For example, when a plaintiff's attorney sues a physician as well as the hospital where the physician has clinical privileges, the plaintiff's attorney may probe the hospital's knowledge about the physician. If the hospital has failed to obtain the Data Bank information it is required to request under HCQIA, the malpractice plaintiff may request access to the Data Bank information on the physician involved.

Whether New Jersey law prohibits disclosure of peer review information is unclear. N.J.S.A. 2A:84A-22.8 generally prohibits disclosure of information and data secured by and in the possession of utilization review committees established by any certified hospital or extended care facilities in the performance of their duties. In 1975, a state lower court interpreting this statute held that its provision of confidentiality is not to be broadened to include all peer review committees. It held that N.J.S.A. 2A:84A-22.8 does not prevent a plaintiff's attorney from discovery of records compiled by a medical records and audit committee, tissue committee, infection control committee, or a medical council, so long as they relate to the patient-plaintiff incidents allegedly the subject matter of a malpractice suit (Young versus King, 136 N.J. Super 127 [Law Div. 1975]).

In 1985, the New Jersey Supreme Court recognized a qualified privilege of self-examination or privilege of self-critical analysis as furthering the public interest. The state's highest court recognized that disclosure of the materials involved in an internal investigation into health care service invokes serious and important questions of public policy that courts carefully must consider. Parties seeking disclosure of such information will be required to demonstrate a need for such discovery that outweighs the investigative agency's need for confidentiality and privacy. (McClain versus College Hospital, 99 N.J. 346 [1985]).

The court's approach to whether peer review materials may be disclosed is a balancing process that will be applied on a case-by-case basis.

COMMENTARY

Will the new federal and state laws achieve the desired result of assuring quality health care while protecting those who engage in appropriate peer review? Will the laws result in increased litigation by physicians who are adversely affected by peer review? Will these requirements of reporting settlements result in more malpractice cases going to trial? Will the federal law result in more suits that include hospitals as defendants? Will the fact that the federal government maintains a lifetime record of adverse actions taken against a physician, while ignoring positive contributions to the profession and the public, really weed out incompetent physicians?

The long-range positive and negative ramifications of the new carrot-and-stick approach to physician regulation in the 1990s will take a decade to truly assess. Peer review bodies and medical societies should scrutinize their bylaws and practices to ensure conformity with the requirements of HCQIA and the Act, to ensure immunity from liability for good faith peer review. ■

Professional Medical Conduct Reform Act

SEAN PATRICK MURPHY, JD

A new law significantly increases the regulation of New Jersey physicians and heightens the State Board of Medical Examiners scrutiny of potentially impaired and incompetent physicians. The law is a comprehensive expansion of New Jersey's physician peer review.

On January 13, 1990, former Governor Thomas Kean signed into law the Professional Medical Conduct Reform Act of 1989 (Act).[1] The Act, one of the most significant health legislative enactments in the state's history, redefines the mechanism for dealing with potentially impaired or incompetent physicians and replaces the existing voluntary program operating under the auspices of MSNJ with a comprehensive regulatory initiative organized under the physician licensing authority, the New Jersey State Board of Medical Examiners (SBME).

The Act strengthens existing reporting laws and establishes new reporting requirements, making it more likely that SBME will be informed and involved in matters of impairment and incompetency. The Act will impact every physician in the state of New Jersey.

BACKGROUND

The vast majority of New Jersey's physicians are competent, caring professionals devoted to their patients and dedicated to medicine. Despite this, it has been reported that between 3 and 16 percent of the physicians in New Jersey are impaired; "unable to properly or safely practice medicine because of alcoholism, other drug abuse, mental illness, senility, or a disabling condition."[2] Approximately 10 percent

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are reported to be incompetent, meaning that they lack "sufficient knowledge, skills, or judgment to adequately practice medicine."[2]

New Jersey has been a recognized leader in confronting these problems. In 1977, MSNJ established the Impaired Physicians Committee, replaced in 1982 by the Impaired Physicians Program (IPP), a volunteer, nonpunitive program that "identifies, confronts, and refers for treatment physicians impaired by alcoholism, drug abuse, mental illness, senility, or disabling injury or disease."[2] In 1983, the New Jersey Legislature passed a series of reporting laws requiring health care facilities and insurance companies to notify SBME of actions that could indicate potential impairment or incompetence.[3] More recently, Congress passed the Health Care Quality Improvement Act of 1986, a federal law that mandates the reporting of such physicians to the National Practitioner Data Bank.[4] Yet the problem of impaired and incompetent practitioners still exists, both in New Jersey and the nation.

The Act strengthens existing reporting laws and establishes new reporting requirements, making it more likely that SBME will be informed and involved in matters of impairment and incompetency. The Act will impact every physician.

In October 1987, a State Commission of Investigation (SCI) issued a report and recommendations on impaired and incompetent physicians (the Report).[2] The Professional Medical Conduct Reform Act is a direct result of the findings of the Report.

THE SCI REPORT

The SCI Report noted that the IPP, either standing alone or in conjunction with the existing reporting laws, cannot adequately remedy the problem. It stated that the IPP lacks the resources to investigate adequately complaints and followup on enrolled clients; lacks the statutory authority to sanction dangerous practitioners; and is unable to objectively monitor problem physicians since the IPP is a physician-sponsored program.[2]

New Jersey's reporting laws also were deemed inadequate. The prior law requiring hospitals to report disciplinary proceedings against such physicians has failed in part, due to general noncompliance and the existence of capricious loopholes, e.g. informal and "voluntary" action on the part of the health care facility was not deemed a "reportable event."[2] The law requiring insurers (including self-insuring physicians) also has failed; not one physician has ever submitted notice of a malpractice award to SBME.[2]

A common thread throughout the Report is the lack of data sharing for dealing with these problems. The Report noted that SBME does not have enough information on physicians who may be impaired or incompetent along with inadequate methods of identifying these physicians.

In response to these concerns, the Report developed a series of conclusions and specific recommendations, many of which have been incorporated into the Act. The following summarizes the significant aspects of the Act, reflecting New Jersey's scrutiny of health care professionals.

THE PROFESSIONAL MEDICAL CONDUCT REFORM ACT

The Professional Medical Conduct Reform Act is a series of new laws and amendments that can be classified into one of the following four categories: provisions designed to improve and correct reporting deficiencies; restructuring SBME to respond to the problem; facilitating the flow of information on impaired and incompetent practitioners; and enforcement of standards and sanctions.

Improving and Correcting Reporting Deficiencies. The Act significantly increases the likelihood that SBME will be notified of health care practitioners who are, or may be, impaired or incompetent by closing a number of loopholes that existed in the old reporting laws. Perhaps the most significant change in this regard is the modification of the law requiring health care facilities (including HMOs) to notify SBME of disciplinary proceedings taken against physicians.

The Act expands the existing reporting law to require health care facilities to report other events, such as when a practitioner voluntarily resigns from staff (if that practitioner was under review for impairment or incompetency); voluntarily relinquishes partial privileges while under review; has full or partial privileges temporarily or summarily revoked; agrees to limitations on clinical privileges; is granted a leave of absence if it relates to impairment or incompetency; or is a party to a suit in which the facility also is a party and in which there is a settlement, judgment, or award.[5] The reporting requirements also have been expanded to include not only physicians with privileges, but also medical residents, interns, and podiatrists ("practitioners").[6]

Medical staffs and health care facilities now must review their current bylaws and procedures to ensure compliance with these changes, and with a view toward what procedures, due process and otherwise, can and should be provided to potentially affected practitioners. Medical staffs that currently use informal means to identify and correct problems of impaired and incompetent practitioners no longer will be able to avoid notification to SBME of these situations. Hospital administrators also now must reevaluate their current notification policies and procedures to make certain that notification to SBME is both made and done so in a timely manner; otherwise the facility may be subject to the increased sanctions found in the Act.

The Act modifies the current law that requires insurance companies to notify SBME.[7] Now, insurance companies must notify SBME in writing of any medical malpractice claim, settlement, judgment, or arbitration award, not merely those matters over $25,000. The Act also provides that the practitioner's insurer now must notify the review panel in writing of any termination or denial of coverage to the practitioner or surcharge assessed on account of the practitioner's practice method or medical practice claims history.[8]

The Act also requires practitioners to notify directly SBME if they are "in possession of information which reasonably indicates that another practitioner has demonstrated an impairment, gross incompetence, or unprofessional conduct which would present an imminent danger to an individual patient or to the public health, safety or welfare."[9] Now, a practitioner's duty to report an impaired or incompetent colleague is not simply grounded in medical ethics, but in statutory law. Practitioners that fail to report in these situations could be subject to both civil penalties and licensure sanctions.[9]

Simply stated, the Act tightens up loopholes in existing reporting requirements to increase the flow of information to SBME, enabling it to better identify situations in which a practitioner may be incompetent or impaired.

Restructuring SBME To Respond to the Problem. Collecting information on practitioners who may be impaired or incompetent is one aspect; having a system in place to process this information and address the problem is another. The Act restructures SBME to provide it with both a mechanism and the financial resources to address problems of impaired and incompetent petitioners.

The Act requires SBME to establish a medical practitioner review panel to receive notification of reportable events and other complaints concerning impaired and incompetent practitioners.[10] The review panel shall consist of members appointed by the Governor: four physicians; three consumers; one administrator of a hospital appointed upon the recommendation of the New Jersey Hospital Association;[10] and one SBME member.

The review panel shall investigate information received regarding impaired and incompetent practitioners and recommend to SBME one of the following: that the affected practitioner be referred to the attorney general for disciplinary action; that the matter be deferred pending litigation or action by the health care facility; that the practitioner be referred to a treatment program; or that no action is warranted. SBME then may affirm, reject, or modify the recommendations of the review panel.[11]

The Act also establishes that SBME shall employ a full-time medical director, a licensed physician who is knowledgeable about, or who has clinical experience in, chemical dependency or addiction-oriented psychiatry. The medical director shall be charged with reviewing complaints, assisting the review panel in making its dispositions, and assisting SBME in making disciplinary determinations regarding the practitioner's license.[12]

These structural changes to SBME are an essential starting point for the Professional Medical Conduct Reform Act to achieve its intended goal of identifying problem practitioners through an orderly process. However, SBME must be certain to extend itself beyond its traditional punitive role with regard to these matters. It must provide a constructive forum for rehabilitation so that practitioners have a fair opportunity to be integrated again into the medical profession.

Facilitating the Flow of Information. Another characteristic of the Act is that it facilitates the flow of information about practitioners. It increases the likelihood that SBME will receive information that may identify a problem practitioner and enables SBME to notify directly health care facilities and fellow practitioners with whom the affected practitioner is directly associated.

The Act requires that practitioners provide SBME with specific information concerning health care facilities in which they have privileges, and that they identify the names and addresses of other practitioners with whom they are directly associated.[13] This will enable SBME to notify these interested third parties when SBME has suspended or otherwise limited a practitioner's license and followup on any practitioner against whom it has taken disciplinary action. SBME now will be able to monitor interns and residents; it will issue permits to such practitioners that will define the permissible scope of practice while in training; and provide a mechanism to monitor them.[14]

New Jersey also is mandating that health care facilities maintain and retain records of "all complaints about and disciplinary proceedings or actions against a practitioner who has an affiliation with the health care facility or health maintenance organization,"[15] as well as records relating to mortality, morbidity, complication, infection, and readmission experience."[16] The collection and maintenance of this information is consistent with the ever-increasing emphasis on health care quality assessment. This information will be useful at the micro level with regard to particular practitioners, and at the macro level with regard to the New Jersey State Department of Health as it attempts to measure the quality of medical services rendered at various health care facilities.

Enforcement Standards and Sanctions. The Act also clearly defines the standard of proof required before SBME can revoke a practitioner's license. It states that SBME "may refuse to grant or may suspend or revoke a license . . . upon a showing of the preponderance of credible evidence that the holder of such license has demonstrated any physical, mental, or emotional condition or drug or alcohol use which impairs his ability to practice with reasonable skill or safety."[17]

The "preponderance of the credible evidence" standard of proof is the lowest level of legal proof, meaning that SBME must merely have evidence that demonstrates, more probably than not, that the affected practitioner is unable to practice medicine safely. If SBME is unable to meet this burden of proof, the practitioner would have independent grounds on which to appeal SBME's actions. This standard of proof is an improvement over the prior subjective standard that simply required proof to the satisfaction of SBME.

The Act certainly strengthens the state's power to sanction persons (including criminal sanctions) and entities that fail to comply with the reporting requirements or other provisions of the Act. The enhanced sanctions increase the likelihood of compliance and increase the likelihood that the Act will remedy the reporting infirmities earlier identified in the SCI Report.

CONCLUSIONS

The Act, including mandatory reporting requirements by health care facilities and the establishment of the review panel, took effect on July 11, 1990. It is too early to draw any definitive conclusions about the actual impact of the Act. The focus at this point should be on education and compliance.

The New Jersey State Department of Health recently promulgated regulations intended to track the requirements of the Act. These regulations should be scrutinized by all since they do not currently reflect all of the "11th hour" changes that were made to the Act just prior to its passage.

Once the review panel becomes fully operational, it is likely that there will be a substantial increase in the number of practitioners reported to SBME for problems of impairment or incompetency. However, many practitioners still are going to be reticent about reporting colleagues. This is understandable considering SBME is the state's licensing authority for physicians.

SBME is going to have to demonstrate that it is not merely a punitive organization. It should affirmatively demonstrate that it also is a forum for rehabilitation. It should make every reasonable and fair effort to try to rehabilitate practitioners before taking the next step of limiting, reducing, or revoking their licenses.

From a larger perspective, the Act continues the statewide and, for that matter, nationwide focus on peer review. It provides a new mechanism to coordinate information from many different sources and ultimately directs it to a single source, SBME, for scrutiny. The centralization of this information also lays the groundwork for state and local programs that routinely will assess and monitor the variations of the quality and cost of health care from one facility to another.

The medical profession must remain vigilant during this time of rapid change. Physicians and medical staffs must make certain that they actively participate in the process of decision making to assure that they are partners in the design of these changes, and not merely the subjects of them. ■

REFERENCES

1. N.J. Stat. Ann. §45:9-19.4 (West Supp. 1989).
2. State of New Jersey Commission of Investigation, *Reports and Recommendation on Impaired and Incompetent Physicians.* (Oct. 1987).
3. N.J. Stat. Ann. §26:2H-12.2 (West 1983); N.J. Stat. Ann. §17:30D-17 (West 1983).
4. Health Care Quality Improvement Act of 1986, Pub.L. No. 99-160, 100 Stat. 3784 (codified at 42 U.S.C. §§11101-11152) (amended by Public Health Service Amendments of 1987, Pub.L. No. 100-177, 101 Stat. 986) [hereinafter HCQIA].
5. N.J. Stat. Ann. §26:2H-12.2 (West Supp. 1989).
6. N.J. Stat. Ann. §26:2H-12.2(f) (West Supp. 1989).
7. N.J. Stat. Ann. §17:30D-17 (West Supp. 1989).
8. N.J. Stat. Ann. §17:30D-17(b) (West Supp. 1989).
9. N.J. Stat. Ann. §45:9-19.5 (West Supp. 1989).
10. N.J. Stat. Ann. §45:9-19.8 (West Supp. 1989).
11. N.J. Stat. Ann. §49:9-19.9 (West Supp. 1989).
12. N.J. Stat. Ann. §45:9-19.6 (West Supp. 1989).
13. N.J. Stat. Ann. §45:9-19.7 (West Supp. 1989).
14. N.J. Stat. Ann. §45:9-19.12 (West Supp. 1989).
15. N.J. Stat. Ann. §26:2H-12.2(a) (West Supp. 1989).
16. N.J. Stat. Ann. §26:2H-12.2(b) (West Supp. 1989).
17. N.J. Stat. Ann. §45:9-16 (West Supp. 1989).

Maternal Deaths in New Jersey: 1988

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Physicians reported 56 maternal deaths in New Jersey in 1988. AIDS, adult respiratory distress syndrome, and trauma were dominant causes of maternal demise. There continues to be value in reviewing maternal deaths. The authors detail a model protocol.

The Subcommittee on Maternal Mortality was established as a division of the Maternal and Child Care Committee of the Medical Society of New Jersey for the purpose of investigating all deaths of pregnant women in our state each year. The information gained is used in an educational effort to prevent recurrences of preventable conditions. The Maternal and Child Health Program of the New Jersey State Department of Health assists this Subcommittee by collecting data. This joint effort of NJDOH personnel and a committee of MSNJ shows how public and private sectors of the health care team can work together to decrease maternal mortality.

RESULTS

There were 117,500 live births in New Jersey in 1988. Reports of 56 pregnant women who died were submitted to the Subcommittee for investigation. The members of the Subcommittee represent all areas of the state and are expected to know of ma-

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Table 1. ***Classification and mortality rates.***

Live Births in 1988	117,500
Maternal Deaths Reported	56
Nonmaternal	16
Maternal	22
Rate (indirect only)	19/100,000 live births
Rate (direct only)	15/100,000 live births
Rate (all causes)	48/100,000 live births
Maternal	34/100,000 live births

ternal deaths occurring in their counties that might not have been tabulated properly. The 1988 data are considered accurate because the present death certificate requires an indication to whether the deceased was pregnant at the time of death.

Table 1 lists the classification and mortality rates using the reporting format suggested by the American College of Obstetricians and Gynecologists. The remaining statistical data are summarized in Tables 2 through 5.

A nonmaternal death is the death of a woman from causes not related to pregnancy or its management. The 16 nonmaternal deaths were due to drug abuse (6), automobile accident (6), homicide (3), and suicide (1). This reflection of the social problems facing our society is startling. Cocaine was found in all drug abuse-related deaths. Alcohol use by the victim or victimizer was a primary contributor in the vehicular deaths. The homicides and suicide apparently were incidental to the pregnancy state.

An indirect maternal death is an obstetrical death resulting from previously existing disease or a disease that develops during pregnancy, labor, or the puerperium that is not directly due to changes of pregnancy. There were 22 deaths: 17 indirect deaths and 5 preventable deaths. One patient was diagnosed with systemic lupus erythematosus at 8 weeks' gestation. She was transferred to a tertiary care unit at 24 weeks' gestation in respiratory distress with untreated severe preeclampsia of 2 days' duration. Earlier referral and more aggressive management of her respiratory problem might have prevented this tragedy. One patient with chronic lung disease and another with aortic stenosis would have benefited by more aggressive medical care. Three patients died as a result of adult respiratory distress syndrome (ARDS). In each instance, an aspiration pneumonia either was undetected or unrecorded. The treatment of developing ARDS requires intensive care delivered by a multidisciplinary team. This usually is accomplished in a unit having a qualified intensive care specialist to coordinate all aspects of care.

A direct maternal death is an obstetrical death due to complications of pregnancy, labor, or puerperium and from intercessors, omissions, incorrect treatment, or from a chain of events resulting from one of these complications. There were 18 such deaths, 9 deaths that were judged to be preventable, and 9 deaths judged to be nonpreventable. Two patients died of ARDS secondary to a delay in the diagnosis of ectopic pregnancy with resulting hypotension and hypoxia. Failure to appreciate the possibility of a splenic artery aneurysm and to perform an exploratory laparotomy promptly led to 1 maternal death. One patient died of sepsis while being treated aggressively with the wrong antibiotic. Several studies showed the organisms to be enterococci and *Clostridium tertium,* both treatable with penicillin or ampicillin. Anesthesia was a contributing factor in 3 deaths. In each case, proper intubation was not performed or the patient was not monitored carefully until she was fully reactive and suffered a resultant hypoxic episode that could not be reversed. One patient died of hemorrhage secondary to a placenta accreta treated with a supracervical hysterectomy when a complete hysterectomy was needed; a hemothorax secondary to a misplaced Swan-Ganz catheter also was a factor in this death.

Table 2. *Characteristics of maternal deaths by race, age, and prenatal care.*

Race	Number	Percent
White	24	43
Other	32	57
Age		
Less than 20	14	24
20-34	36	64
35-39	5	9
Greater than 40	1	12
Prenatal Care		
None	2	3
Inadequate	6	11
Unknown	16	29
Adequate*	24	43
Excluded (abortion or ectopic)	8	14

*Initial evaluation prior to 20 weeks' gestation with regular followup for at least five visits.

Table 3. *Parity and duration of pregnancy.*

Parity	Number	Percent
0	13	23
1-3	25	45
4-6	4	7
Unknown	14	25
Gestational Age		
Less than 20 weeks	13	23
20-28 weeks	12	21
28-40 weeks	15	27
Postpartum	10	18
Postabortal	6	11

Table 4. *Classification and preventability.*

Nonmaternal			16
Maternal			40
Indirect		22	
Nonpreventable	17		
Preventable	5		
Direct		18	
Nonpreventable	9		
Preventable	9		
Physician Factor		11	
Patient Factor		3*	

*In one death, physician and patient shared preventability.

DISCUSSION

The death of a pregnant woman is perceived as a singular tragedy by medicine and society. The relative infrequency of its occurrence can exaggerate the inaccurate and unrealistic belief that the death of such a patient no longer occurs in today's practice of medicine.

The analysis of maternal deaths has important public health and preventive health implications. Of separate and equal importance is the examination of a maternal death by the health professionals most closely associated with the care of the patient. A constructive review with factual and objective information can replace the hearsay and conjecture that frequently accompany this event. Such a review provides a forum for valid data collection, formal discussion of medical care, and purposeful examination of alternative approaches. The result is a relevant, factual, and objective documented record.

The initiation of a retrospective analysis of a patient's death is a responsibility of the leadership of the hospital's department of obstetrics and gynecology. The mechanism for doing so lends itself to the following generic description.

A portion of a regularly scheduled departmental meeting is set aside for a clinical conference. Members of the department personally caring for the patient and other health professionals who provided care are invited. Furthermore, because the review may result in a stimulus for change, those individuals who are responsible for supervising care in the involved disciplines are invited to attend, so members of the departments of nursing, clinical laboratories, social services, anesthesiology, pediatrics, medicine, and surgery will be at the meeting. A written protocol, prepared by a delegated member of the department, abstracts facts of the case in a succinct, accurate, and objective manner. The focus is directed at material pertinent to the outcome with specific attention directed to the contributions by the medical practitioners, to the health care system, and to the patient. The mission is to identify causal versus casual linkages. This is prepared in draft form by the obstetrician for review, editing, and concurrence by the physicians directly involved with the patient. The final document need not identify the patient. This protocol is distributed to the attendees at the time of the meeting. The chair of the department or a designee is the moderator of the meeting. The sequence begins with the presentation of the written case protocol followed by the audience asking questions for clarification. These questions frequently highlight areas of appropriate care, disagreement about care, and deficiencies in the ability

Table 5. *Causes of death.*

I.	**Nonmaternal**			**16**	
		Drug Overdose			6
		Auto Accident			6
		Homicide			3
		Suicide			1
II.	**Maternal**			**22**	
	A.	Indirect			17
		1.	Nonpreventable		17
			AIDS		6
			Lung Conditions		3
			Cardiovascular Disease		5
			Other		3
		2.	Preventable		5
			Adult Respiratory Distress Syndrome		3
			Systemic Lupus		1
			Aortic Stenosis		1
	B.	Direct			18
		1.	Nonpreventable		9
			Unexplained		3
			Pulmonary Embolus		2
			Preeclampsia		1
			Eclampsia		1
			Acute Hepatic Necrosis		1
			Ectopic Pregnancy		1
		2.	Preventable		9
			Adult Respiratory Distress Syndrome		2
			Anesthesia		3
			Preeclampsia		1
			Splenic Artery Aneurysm		1
			Postpartum Hemorrhage		1
			Sepsis		1

to provide care. The moderator's task is to maintain an atmosphere of objectivity, impartiality, and constructive criticism. Control of the discussion is particularly helped by the avoidance of cross conversations and interruptive remarks by the audience. It is appropriate for the moderator to make interpretations after some individuals' comments and to question other comments in order to maintain direction and purpose.

When a cause of death can be identified, an appropriate, education-oriented discussion should ensue. When possible, a local recognized authority may be invited, but a member of the department usually can be found to present the information in an effective manner. The patient's death frequently serves to illustrate specific features of the known facts about the disease process. This can result in enhanced learning.

A final responsibility of the moderator is to provide an oral and written summary of the meeting. The oral summary is most helpful when it emphasizes opportunities for improvement, change, and/or modifications that may help to prevent recurrence. The written summary lists the highlights of the patient's course, the contents of the discussion in general terms, and any plans that will be pursued. It is not necessary or appropriate to make comments that assign value judgments. These minutes are kept in the department's files with a copy to the hospital's risk manager.

It is naive and inappropriate for any physician to ignore the medicolegal climate of today's practice of medicine. A maternal death can stimulate concerns of professional liability. These concerns are destructive when they interfer with retrospective evaluation of actions and events, and thus, stifle professional learning. Physicians need to understand their legal responsibilities and how to diminish the risk of lawsuits. Hospital risk management personnel can serve as colleagues in a review process; their control and dictation of the process is not expected, necessary, or appropriate.

SUMMARY

There was an abrupt increase in the number of maternal deaths in New Jersey in 1988. The state average over the past five years is 26 maternal deaths. This increase is due to increased surveillance on the part of the New Jersey State Department of Health and the use of the newer death certificate requiring the death of a pregnant woman to be noted. Local departmental clinical conferences concerning maternal mortality lend themselves to a format that is professional and pertinent, and facilitates learning. We urge their consistent implementation by local departments. ■

REFERENCES

1. Steffen GE: Quality medical care, a definition. *JAMA* 260:56-61, 1988.

2. Donabedian A: The quality of care. How can it be assessed? *JAMA* 26:1743-1748, 1988.

3. Practive Management: PRECIS IV. *Amer Coll Obstet Gynecol* Washington DC, 1989.

4. Quality assurance, monitoring, and evaluation in obstetrics and gynecology. *Obstet Gynecol/Report* 1:244-248, 1989.

5. Koonin LM, Atrash HE, Rochat RW, Smith JC: Maternal mortality surveillance, United States, 1980-1985. *MMWR* 37:19-29, 1988.

Crack-Induced Enteric Ischemia

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Rare instances of intestinal ischemia subsequent to cocaine use have been reported. Crack abuse, linked to gastroduodenal ulcer perforation, has not been associated with mesenteric infarction until this case report.

Small bowel ischemia can result from cocaine abuse.[1-3] This complication can occur whether cocaine is ingested or inhaled nasally. With the introduction of freebase cocaine or "crack," gastrointestinal ischemia manifesting as acute gastropyloric ulceration has been reported.[4] We present a case of small bowel ischemia secondary to crack abuse.

A 37-year-old black female presented to the emergency department of St. Francis Medical Center, Trenton, with a five-day history of nausea, vomiting, and abdominal pain. The pain was described as constant and sharp in nature, and localized primarily in the periumbilical and suprapubic areas. The patient was anorectic and obstipated without fever, chills, or melena.

The patient had a history of alcohol abuse. She had used intravenous cocaine and heroin about 14 years earlier. However, she had started using crack occasionally in the preceding two months. The last use was one day prior to her present symptoms.

The patient was uncomfortable and dehydrated. Vital signs were normal. Skin and mucous membranes appeared dry. Lungs were clear to auscultation. Abdomen was distended with hypoactive

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bowel sounds, tenderness, rebound, and guarding in all four quadrants. The right lower quadrant was slightly more tender than the left quadrant. No stool was present in the rectum. White blood cell count was 8700 mm^3 with 57% neutrophils, 11% bands, and 28% lymphocytes. Hemoglobin was 12.6 gm/dL and hematocrit was 38.1%. Serum amylase was normal with sodium 134 meq/L; potassium was 3.5 meq/L; chloride was 92 meq/L; carbon dioxide was 32 meq/L; urea nitrogen was 45 mg/dL; and creatinine was 1.3 mg/dL. Abdominal x-rays showed small bowel distension with a small amount of air in the colon.

We made a diagnosis of small bowel obstruction secondary to perforated appendix or adhesions. The patient underwent exploratory laparotomy. Approximately 50 ml of serosanguinous fluid was found in the abdominal cavity. The distal ileum appeared hemorrhagic with areas of gangrene and multiple strictures. The involved bowel was resected. The patient did well postoperatively except for a wound infection that was treated and resolved.

The pathology report showed 50.5 cm of distal ileum with multiple areas of segmental constriction. The mucosa was hemorrhagic with three segments of hemorrhagic infarction, superficial areas of ulceration, and marked venous congestion of the mesentery without mesenteric vein thrombosis. The lumen of the vermiform appendix was patent without evidence of inflammation.

DISCUSSION

The first case of intestinal ischemia caused by cocaine ingestion was reported in 1985 by Nalbandian.[3] Intestinal ischemia caused by cocaine sniffing subsequently was reported.[2] More recently, gastropyloric ulcers also have been reported after crack abuse.[4] This case illustrates that a short period of crack abuse can lead to intestinal ischemia. Crack has been noted to have a rapid and intense effect upon the central nervous, cardiovascular, and gastrointestinal systems.[5]

The capacity of cocaine to cause profound vasoconstriction is exemplified by the occurrence of nasal septal perforation with intranasal use of cocaine. At the cellular level, cocaine causes blockade of the re-uptake of norepinephrine at adrenergic nerve endings, potentiating the effects of sympathetic nerve stimulation and resulting in vasoconstriction of regional vessels. This major pharmacologic effect of cocaine leads to ischemia of the heart[6] and gastrointestinal system.[2-4] In the cardiovascular system, myocardial ischemia results from vasoconstriction of the coronary arteries and a decrease in coronary blood flow.[6,7] In the stomach, localized ischemia in the pyloric region may account for the ulceration reported by Abramson.[4] In the small bowel, cocaine probably affects the superior mesenteric artery causing a nonocclusive mesenteric ischemia. Other causes of nonocclusive mesenteric ischema include congestive heart failure, myocardial infarction, cardiac arrhythmias, digitalis therapy, and factors causing mesenteric vasoconstriction such as hypovolemia, hemoconcentration, septic shock, and use of vasopressors.[8,9] With the increase in crack abuse, physicians must consider the possibility of gastrointestinal ischemia in addicts presenting with abdominal pain. As a consequence, the patient may present with ileus or small bowel obstruction. A high index of suspicion is important for appropriate therapy of this condition. In the late stage of the disease, bowel resection with anastomosis is the treatment of choice. The use of fluorescein or ultrasound intraoperatively may help determine the extent of the resection.[3]

With earlier detection, cocaine-induced mesenteric ischemia might be treated conservatively. A case of nonocclusive mesenteric vascular insufficiency secondary to heart failure was successfully treated with tolazoline injected through the same superior mesenteric arterial catheter used to establish the diagnosis as reported by Habboushe. Drugs such as papaverine, glucagon, phenoxybenzamine, and isoproterenol can be possible therapeutic agents.[9] Prostacyclin, a potent, short-acting vasodilator, also could be used. ■

REFERENCES

1. Creglar LL, Mark H: Special report—medical complications of cocaine abuse. *N Engl J Med* 315:1495-1499, 1986.
2. Mizrahi S, Laor D, Stamler B: Intestinal ischemia induced by cocaine abuse. *Arch Surg* 123:394, 1988.
3. Nalbandian H, Sheth N, Dietrich R, et al.: Intestinal ischemia caused by cocaine ingestion: Report of two cases. *Surgery* 97:374-376, 1985.
4. Abramson DL, Kral IG, Gertler JP, et al.: Gastropyloric ulcers related to crack. *JAMA* 262:617-618, 1989.
5. Washton AM, Gold MS, Pottash AC: Crack: Early report of a new drug epidemic. *Post Grad Med* 80:52-58, 1986.
6. Smith HWB III, Liberman HA, Brody SL, et al.: Acute myocardial infarction temporally related to cocaine use. Clinical, angiographic, and pathophysiologic observations. *Ann Intern Med* 107:13-18, 1987.
7. Lange RA, Cigarroa RG, Yancy CW et al.: Cocaine-induced coronary artery vasoconstriction. *N Engl J Med* 321:1557-1562, 1989.
8. Berger RL, Byrne JJ: Intestinal gangrene associated with heart disease. *Surg Gynecol Obstet* 112:529-533, 1961.
9. Habboushe F, Wallace HW, Nusbaum M, et al.: Nonocclusive mesenteric vascular insufficiency. *Ann Surg* 180:819, 1974.

Noninvasive Diagnosis of

Deep Vein Thrombosis

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Deep vein thrombosis is a serious medical problem that may lead to pulmonary embolus. The authors discuss the noninvasive diagnosis of deep vein thrombosis using venous occlusion plethysmography and ultrasonic duplex scanning.

Deep vein thrombosis (DVT) is a major cause of morbidity and mortality in hospitalized patients. The incidence of DVT in patients over 40 undergoing major surgical procedures approaches 50 percent. The most feared complication of DVT is pulmonary embolus (PE). As many as 10 percent of patients with DVT may develop PE. Over 150,000 fatal pulmonary emboli occur in the United States each year. The clinical diagnosis of DVT is 50 percent accurate. Therefore, objective tests are needed to make the diagnosis.

I^{125} fibrinogen scans, used for the detection of DVT of the lower extremity, can detect active thrombus in calf and popliteal veins. While it is a very sensitive test for active clot, an I^{125} fibrinogen scan has several major disadvantages: it is very nonspecific; ionizing radiation exposure and the necessity to block thyroid uptake has to be considered; completion usually requires several days; and availability of the isotope is quite limited.

Magnetic resonance imaging (MRI) as an imaging modality for DVT of the lower extremity is not a proved clinical method, although it is undergoing clinical research trials. Currently, the diagnostic modalities of choice at Cooper Hospital are venous occlusion plethysmography (VOP) and ultrasonic duplex scanning.

VOP is a technique that takes advantage of the hemodynamic changes that occur in the leg as a consequence of DVT. A blood pressure cuff is applied to the thigh and inflated to a pressure of approximately 60 mmHg, enough to obstruct venous return but not to impede arterial inflow. A second cuff is used to measure changes in volume of the calf. The calf volume increases as the veins fill and distend with blood. After maximal filling has been achieved, the thigh tourniquet is abruptly released and a reduction in volume of the calf is measured as the venous blood flows out of the calf and back

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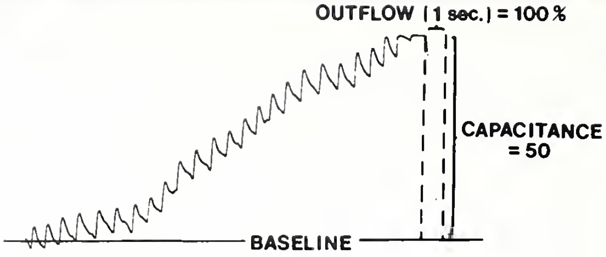


Figure 1. Normal VOP trace.

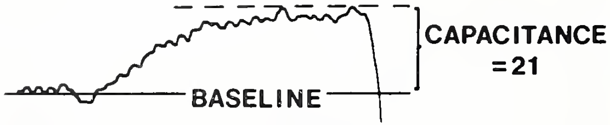


Figure 2. VOP trace demonstrating reduced venous capacitance.

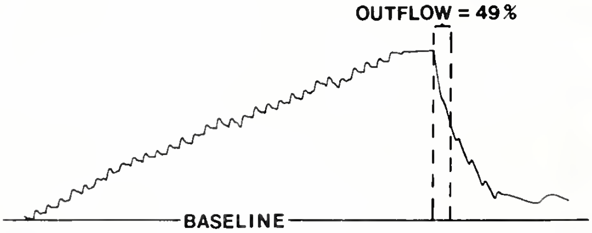


Figure 3. VOP trace demonstrating reduced venous outflow.

toward the heart. This provides two measurements of venous hemodynamics, the venous filling or capacitance and the venous outflow, measured by convention for the first second after tourniquet release.

The test is performed supine: the leg veins are nearly empty at rest and normally considerable filling can be demonstrated. The capacitance should be approximately equal bilaterally. The outflow at one second normally is about 100 percent and, again, should be symmetrical (Figure 1). In the presence of a proximal occluding venous thrombus, the veins in the calf may be partially distended with blood prior to application of the thigh tourniquet so venous capacitance may be reduced (Figure 2). Also, release of the tourniquet may result in sluggish venous outflow because of the obstructing proximal clot (Figure 3). An asymmetry in venous capacitance between the two legs of greater than 20 percent is associated with the presence of DVT. Also, a reduction in venous outflow at one second to 50 percent or less of baseline is diagnostic of DVT. With these criteria, a sensitivity of 80 percent and a specificity of 87 percent has been achieved for the diagnosis of DVT with an overall accuracy of 81 percent.[1] Similarly, when looking for residual thrombi in patients sustaining clinically significant PE, this technique has demonstrated a sensitivity of 100 percent and a specificity of 92 percent for an overall accuracy of 97 percent.[2]

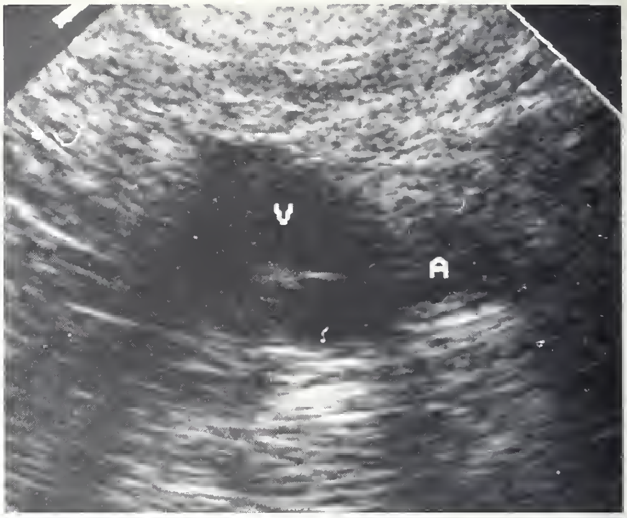


Figure 4A. A = common femoral artery; and V = common femoral vein.

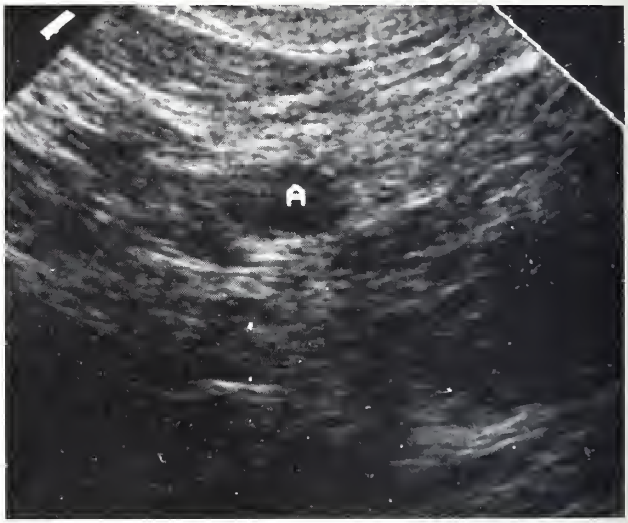


Figure 4B. Vein obliterated after compression.

Despite the usefulness of the plethysmographic technique, there are several pitfalls. The technique cannot distinguish intrinsic obstruction caused by thrombus from extrinsic compression by tumor, hematoma, or abscess. Thrombi that do not occlude veins may not produce the same hemodynamic effects and, therefore, may be missed by a test that relies on alterations in the functional hemodynamics.

Similarly, patients that have had previous DVT may have developed abundant collateral veins that similarly can mask the hemodynamic abnormality in the event of a recurrent ipsilateral DVT. Consequently, although VOP is diagnostically useful, the clinician may find it reassuring to have the hemodynamic data confirmed with anatomic visualization of the underlying pathology. For this reason, we also image the deep veins directly.

Contrast venography (CV) has long been considered the "gold standard" for the diagnosis of acute DVT. However, improved technology has enabled ultrasonic duplex scanning to approach

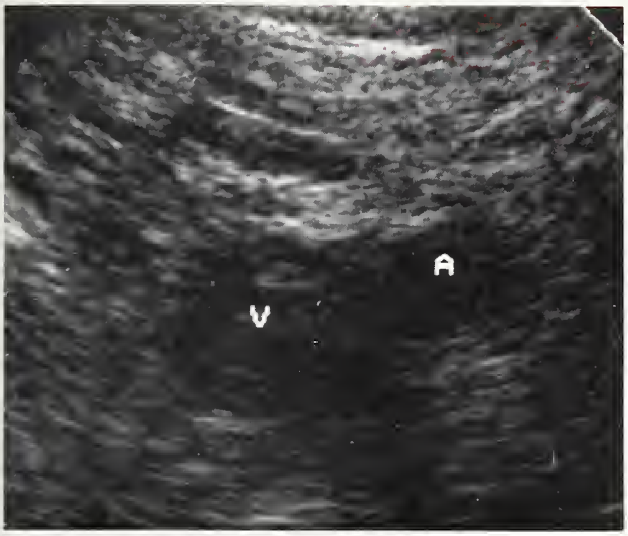


Figure 5A. A = common femoral artery; and B = common femoral vein.

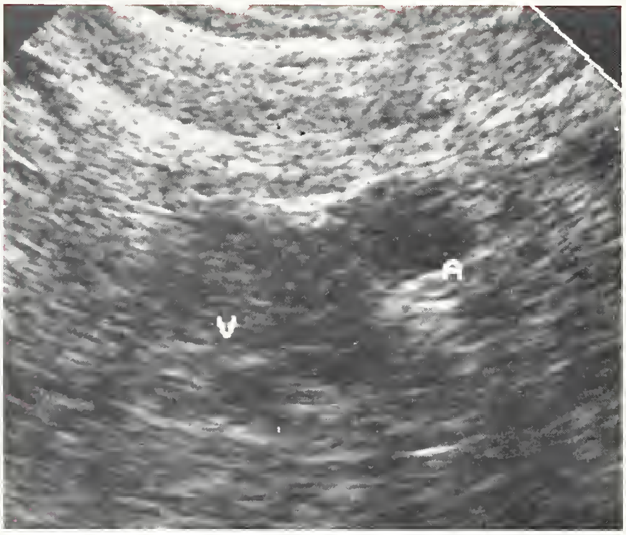


Figure 5B. Common femoral vein filled with thrombus, not compressible.

diagnostic accuracy of CV. Since CV is invasive, involves radiation exposure, and uses iodinated contrast material, there are contraindications and complications. Technical problems with vein cannulation, local extravasation of dye in the foot, and incomplete filling of deep veins with resulting difficulties in interpretation can occur in up to 10 percent of CVs. Contrast-induced phlebitis as a consequence of CV also can occur. Therefore, duplex scans, that are noninvasive and involve no radiation or dye, may be considered as an alternative for the diagnosis of DVT. Duplex scanning implies dual ultrasonic modalities: real-time (B-mode) imaging and Doppler flow.

The normal ultrasound appearance of a deep vein is that of an echo-free lumen with smooth internal surfaces. An important characteristic of a normal vein is compressibility. Normal veins are fully compressible by gentle external pressure from the handheld transducer (Figures 4A and 4B). When the lumen of a vein contains thrombus, it will not compress (Figures 5A and 5B). This is best evaluated in the transverse plane. Thrombus may occasionally be directly visualized in the sagittal plane although this may be a more difficult observation.[3]

Using the Doppler mode, normal spontaneous flow is detected in large and midsize veins at rest. Smaller calf veins require augmentation by distal compression of the leg to visualize flow. Midsize and large veins also show an augmented response to squeeze. The lack of augmented flow in deep veins of the leg indicates obstruction. Also, in larger veins, where respiratory variation is a normal finding, its absence indicates obstruction.

During a duplex examination, the anterior and posterior tibial veins, and popliteal, superficial femoral, and common femoral veins are examined. The sensitivity of the examination for DVT is 91 percent and the specificity is 99 percent. It should be noted that the sensitivity is much less for isolated calf vein thrombi, but since these have a low risk of PE this may not be an important shortcoming.

These considerations have led us to the following algorithm. We perform bilateral VOP and duplex scan of the symptomatic leg or the one with the abnormal VOP study. If DVT is documented, the diagnosis is established and no further workup is needed. If DVT is not found and clinical suspicion is high, further workup with CV, lung scan, or pulmonary angiogram may be appropriate. If the finding of VOP and duplex scan are discordant, i.e. VOP is positive for DVT but duplex scan fails to demonstrate thrombus, CV is performed to clarify the diagnosis.

We have achieved a high degree of accuracy in the diagnosis of DVT with this approach. CV remains a valuable tool in selected patients, but most patients at Cooper Hospital can be satisfactorily evaluated without the risk or discomfort thanks to the development of the newer noninvasive modalities. ■

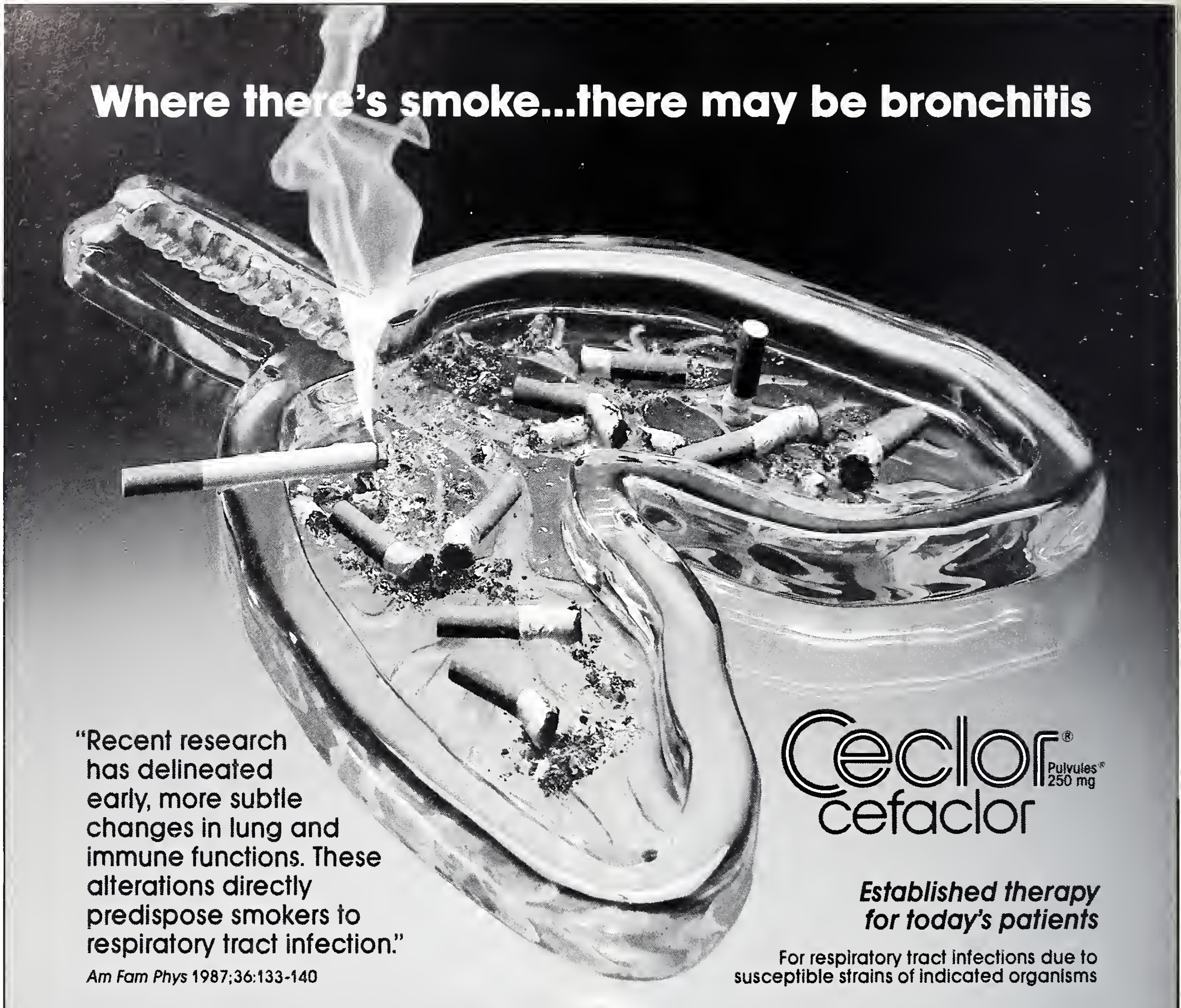
REFERENCES

1. McLandless ME, Young JR, Swift CL: Noninvasive diagnosis of clinically suspected deep venous thrombosis. *Cleve Clin Q* 52:555-560, 1985.

2. Huisman MV, Buller HR, Ten Cate JW, Vreeken J: Serial impedance plethysmography. *N Engl J Med* 314:823-828, 1986.

3. Raymond HW, Zwiebel WJ, Harnsberger HR: Duplex sonography of the venous system. *Sem Ultrasound, CT, MR* 9:269-319, 1988.

4. Lensing AWA, Prandoni P, Brandies D, et al.: Detection of deep venous thrombosis by real-time B-mode ultrasonography. *N Engl J Med* 320:342-345, 1989.



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Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

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- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
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Therapy-related adverse reactions are uncommon. Those reported include:
- Hypersensitivity reactions have been reported in about 1.5% of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of **serum-sickness-like** reactions have been reported with the use of Ceclor. These are characterized by findings of erythema multiforme, rashes, and other skin manifestations accompanied by arthritis/arthralgia, with or without fever, and differ from classic serum sickness in that there is infrequently associated lymphadenopathy and proteinuria, no circulating immune complexes, and no evidence to date of sequelae of the reaction. While further investigation is ongoing, **serum-sickness-like** reactions appear to be due to hypersensitivity and more often occur during or following a second (or subsequent) course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults with an overall occurrence ranging from 1 in 200 (0.5%) in one focused trial to 2 in 8,346 (0.024%) in overall clinical trials (with an incidence in children in clinical trials of 0.055%) to 1 in 38,000 (0.003%) in spontaneous event reports. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy; occasionally these reactions have resulted in hospitalization, usually of short duration (median hospitalization = two to three days, based on postmarketing surveillance studies). In those requiring hospitalization, the symptoms have ranged from mild to severe at the time of admission with more of the severe reactions occurring in children. Antihistamines and glucocorticoids appear to enhance resolution of the signs and symptoms. No serious sequelae have been reported.
- Stevens-Johnson syndrome, toxic epidermal necrolysis, and anaphylaxis have been reported rarely. Anaphylaxis may be more common in patients with a history of penicillin allergy.
- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1% and, rarely, thrombocytopenia and reversible interstitial nephritis.

Abnormalities in laboratory results of uncertain etiology.
- Slight elevations in hepatic enzymes.
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Nicholas A. Bertha, MD

NANCY M. PROPSNER

Nicholas Aladar Bertha, MD, has been an asset to the Dover area for over 50 years. Dr. Bertha opened Dover General Hospital and Medical Center's first cancer clinic in 1946, and was in charge of the clinic until 1960. Recently, a new cancer therapy and education center at Dover General Hospital and Medical Center has been named in his honor. "Naming our new cancer center after Dr. Bertha reflects our admiration of his selfless dedication to his patients and our appreciation of his exceptional contributions to the history and growth of Dover General Hospital and Medical Center," explained hospital president, Wayne Schiffner. The highlight of the $2.5 million Dr. Nicholas A. Bertha Regional Cancer Center is a dual energy megavolt linear accelerator, providing precision and accuracy while minimizing cancer treatment side effects.

Born and raised in Wharton, Dr. Bertha helped to establish the borough's first aid squad and the practical nursing course at Morris Hills High School. He also served on the board of directors at Dover General Hospital and Medical Center. In 1953, Dr. Bertha helped to found St. Clare's Riverside Medical Center, Denville, serving as the director of surgery until 1964 and as president of the medical staff for two years. He also served on Wharton's Fire Department and Board of Health.

Recently, the town of Wharton honored Dr. Bertha with the Dover-West Morris Annual Community Service Award. The monument was presented to Dr. Bertha by the Chamber of Commerce for his long-time dedication to Morris County's health care system and to his community.

Following his graduation from Wharton High School, Dr. Bertha received his bachelor of science degree from New York University in 1928, and his medical degree from New York University–Bellevue Hospital Medical School, New York City, in 1932. Dr. Bertha served a residency in gynecology and obstetrics at Lying-In Hospital and a surgical residency at Bellevue Hospital, both in New York City. Dr. Bertha then pursued a four-year postgraduate course in surgery at New York University School of Medicine. Dr. Bertha opened his private general surgery and gynecology practice in Dover in 1937.

Dr. Bertha served as president of the Medical Society of New Jersey in 1969, of the Morris County Medical Society, and of the Society of Surgeons of New Jersey. Dr. Bertha was a founding member of the New Jersey Obstetrical and Gynecological Society, and is a member of the American Medical Association and our Morris County component. In addition, Dr. Bertha served as chairman for two years for the Medical Society of New Jersey Board of Trustees. He is a fellow of the International College of Surgeons, and of the American College of Surgeons, appointed to the executive council of the New Jersey chapter of the American College of Surgeons.

Dr. Nicholas Bertha

Serving in World War II, as an Army major from 1942 to 1945, Dr. Bertha commanded the 662nd Medical Clearing Company and helped to establish the field surgical hospitals. He served in these hospitals in France and Germany as a battlefield surgeon. Dr. Bertha was honored with six campaign battle stars, with the Bronze Star, and with a distinguished unit commander citation.

Retired since 1987, Dr. Bertha, who resides in Lake Hopatcong with his wife, Phyllis, has two sons, Nicholas J. and John Allen, six grandchildren, and one great grandchild.

Ms. Propsner is the editorial assistant for *NEW JERSEY MEDICINE*.

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Antisense DNA-Analogs

Inhibition of Human Immunodeficiency Virus

YON EBRIGHT, PhD
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SUNANDA GAUR, MD
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JONGLIN TSAO
STANLEY STEIN, PhD

Considering the complexity of life processes and the precision of the development of an organism, genetic information must be under fine control. The challenge is to develop drugs to imitate natural processes and influence genes associated with specific diseases.

Genetic regulation was thought to be exclusively under the control of proteins, e.g. inducers, repressors, transactivators. Inouye and coworkers were among the first investigators to report that RNA transcripts, produced by specific regulatory genes, can act as regulatory factors.[1] These molecules have been named antisense RNA, since they are complementary to the "sense" RNA strand, such as the mRNA that codes for a protein. A gene that codes for an antisense RNA is termed an antisense gene.

Experimentation already has demonstrated the capability of mimicking this control mechanism by using DNA constructs that code for antisense RNA. In an early example, a plasmid-containing antisense construct to β-galactosidase mRNA was shown to inhibit biosynthesis of this protein by 98 percent.[2] Similarly, plasmids carrying antisense genes for the coat protein, the replicase, and the maturation protein of *coliphage SP* were constructed; *E. coli* transfectants became resistant to this phage.[3,4] Antisense constructs have been introduced into eukaryotic cells and this research attracts attention.[5-12]

Multiple mechanisms of inhibition are possible. In one example, the antisense RNA hybridizes to and thereby blocks a primer RNA for plasmid replication.[1] The inhibition of an mRNA by an antisense RNA can be through a process called "translation arrest," in which translation initiation and/or elongation is sterically prevented (Figure 1).

SYNTHETIC ANTISENSE MOLECULES

The use of a biological vector, such as an attenuated or disabled virus, for administering antisense DNA to a human or an animal has certain attributes. It overcomes the problems associated with getting such a "drug" into target cells in an active form. That is, it utilizes the cellular uptake and genetic regulatory elements inherent to that viral vector. Furthermore, replication of the virus would assure a continual supply of antisense RNA. Production of such biological drugs are within the capabilities of current recombinant DNA technology, but the biohazard risks will have to be evaluated carefully before such microorganisms, if constructed, could be used therapeutically.

The alternative is to use chemically synthetic antisense molecules, such as short, single-stranded DNA. In this case, the DNA would not act to code for an antisense RNA, but would interact directly with its complementary target. An early experiment demonstrated the ability of a 13-residue synthetic oligodeoxyribonucleotide, i.e. a 13-mer, to inhibit the cell-free translation of Rous sarcoma viral RNA.[13] With the advent of automated DNA synthesizers, short DNA-oligonucleotides have been used in many studies to inhibit cellular processes,

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The authors are affiliated with UMDNJ-Robert Wood Johnson Medical School. The manuscript was submitted in June 1990 and accepted in July 1990. Requests for reprints may be addressed to Dr. Stein, Center for Advanced Biotechnology and Medicine, 679 Hoes Lane, Piscataway, NJ 08854-5635.

even in whole cells. For example, it was possible to "reverse" the phenotypic transformed state of human promyelocytic leukemia (HL-60) cells by inhibiting the myc proto-oncogene.[14] In this study, it was shown that a 15-mer, complementary to the initiation codon region of c-myc mRNA, concomitantly inhibited c-myc protein expression and cell proliferation in culture. In another example, DNA-oligonucleotides ranging in length from 12 to 26 residues were shown to be capable of substantially inhibiting HIV-1, the causative virus of AIDS, in infected cultured human lymphocytes.[15]

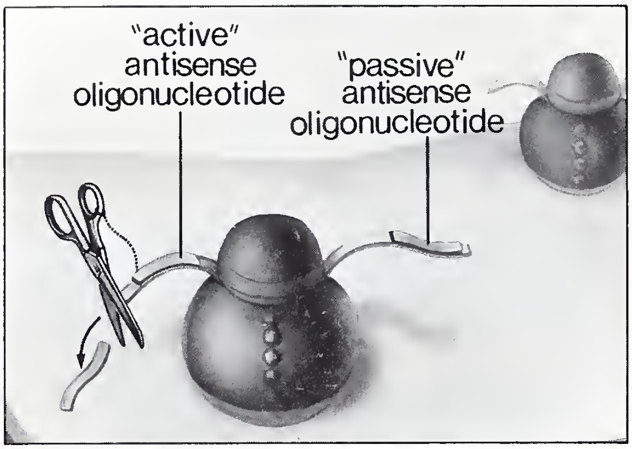
"active" antisense oligonucleotide
"passive" antisense oligonucleotide

Figure 1. Representation of inhibitory mechanisms of antisense oligomers. An antisense RNA, DNA, or DNA-analog can "passively" inhibit translation of an mRNA into protein by sterically preventing ribosomal initiation or elongation. The "active" version of an antisense oligomer would have a pendant group capable of permanently disabling the target mRNA, such as by scission or by crosslinking. The antisense strand also might activate RNase H digestion of the mRNA target in a catalytic manner.

When the antisense strand is DNA, another mechanism of inhibition of target RNA is possible.[16] This is through the action of RNase H, an enzyme known to hydrolyze the RNA partner of an RNA/DNA duplex. This should constitute a catalytic mechanism, since the DNA strand is released after hydrolysis of the RNA strand and it then is able to bind and cause degradation of other RNA strands. Other approaches for inhibiting DNA or RNA targets have been devised. An active moiety on the DNA-oligonucleotide could be used to cause target strand destruction (Figure 1). One notable example is the hydroxyl free-radical generating system employing an iron-chelate complex.[17]

BACKBONE-MODIFIED OLIGONUCLEOTIDES

There are potential technical obstacles to the use of synthetic DNA-oligonucleotides as drugs. First,

***Table.* Inhibition of HIV with antisense DNA-analogs.**[20-25]

Compound/Type	Sequence (5'—>3')	Conc. µg/ml	% Inhibition Syncytia	p24
1. Control DNA	ACACCCAATTCTGAAAATGG	4	33	44
		20	33	39
		100	65	44
2. Methylphosphonate	ACACCCAATTCTGAAAATGG	4	60	62
		20	98	100
		100	100	100
3. Methylphosphonate	ACACCCAATTCTGAAAATGG	4	39	0
		20	50	50
		100	85	78
4. Phosphorothioate	ACACCCAATTCTGAAAATGG	4	38	63
		20	86	91
		100	100	100
5. Phosphorothioate	CGAGATAATGTTCACACAAC	4	0	0
		20	89	93
		100	100	100
6. Phosphormorpholidate	ACACCCAATTCTGAAAATGG	4	59	57
		20	91	86
		100	(toxic)	

The sequence is antisense to a tat splice acceptor site, except for compound 5 that is a nonspecific sequence.
Nucleoside 3'-modified linkages are underlined (i.e. compound 2 has one phosphodiester bond).
Based on the molecular weights of these compounds, 100 µg/ml is equivalent to about 15 µM.
HIV-1 was added to H-9 or MOLT-3 cells at a virus particle to cell multiplicity of about 1000. Oligonucleotides were added at the same time and bioassays were done after 96 hours.

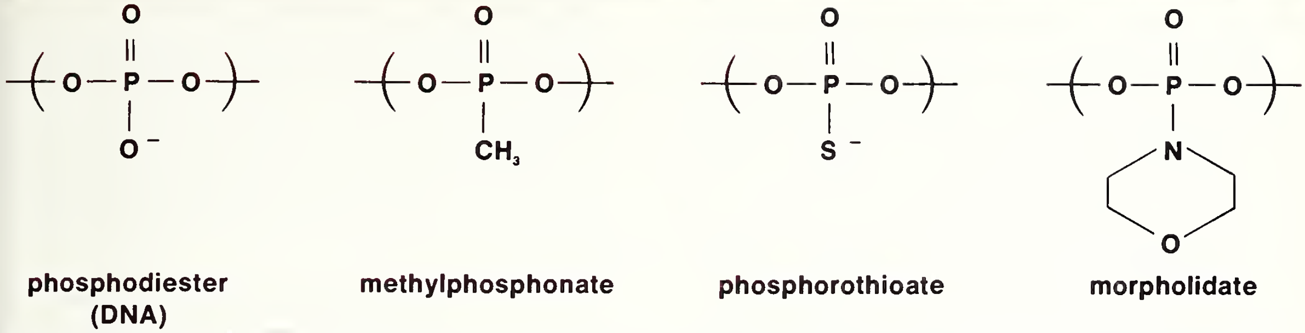

Figure 2. Structures of internucleoside linkages in backbone-modified DNA. These examples represent compounds that have been synthesized and tested for anti-HIV activity, as listed in the Table. The phosphorothioate analog is similar to DNA in that it has a negative charge. The three analogs shown can exist in two stereoisomeric forms, whereas the two oxygen atoms in DNA, not in phosphodiester linkage, are equivalent resonance structures.

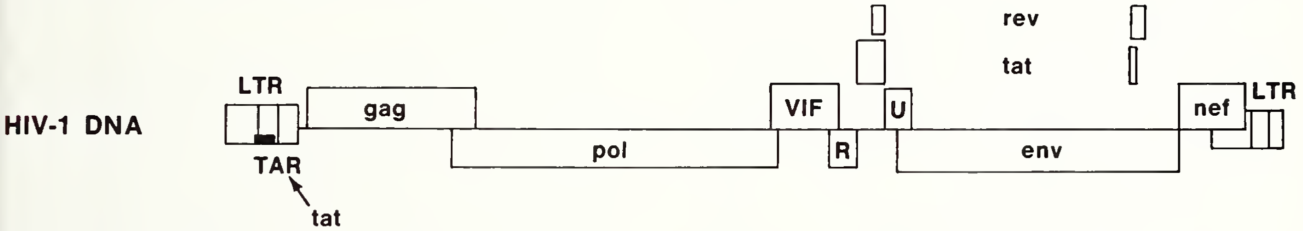

Figure 3. Schematic representation of the genetic map of HIV proviral DNA. The positions of the various genes and regulatory elements are shown on the 9.7 kilobase HIV genome. The LTRs contain regulatory elements for viral gene expression and replication, including promoter and enhancer sequences, polyadenylation signals and the TAR region, the target for the viral transactivating tat protein. The structural genes are described in the text.

the molecules must be able to survive exposure to degradative enzymes (nucleases) in the blood and intracellular millieu. Second, they must be taken up into cells, and this process has not been fully elucidated. Although uptake occurs in cell culture, it generally may not be applicable in vivo. To deal with these concerns, Miller and Ts'o have pioneered the development of nonionic, backbone-modified DNA.[18] Several different types of ionic and nonionic internucleoside linkages (Figure 2) as well as other types of modifications have been investigated.[19]

One of the most studied classes of backbone-modified oligonucleotides contains nonionic, methylphosphonate internucleoside bonds (MP-DNA). MP-DNA has certain desirable properties. The sequence specificity and strength of hybridization of MP-DNA to its complementary target is similar to that of the usual charged DNA.[20] MP-DNA is resistant to nucleases and, by virtue of its noncharged character, has enhanced uptake and access to intracellular compartments.[18]

SYNTHESIS AND PURIFICATION OF MP-DNA

Phosphonamidite monomers are commercially available for the synthesis of MP-DNA on automated instruments. It is possible to synthesize completely nonionic, or mixed oligomers in which some of the internucleoside bonds are the usual phosphodiester linkages. The use of completely nonionic

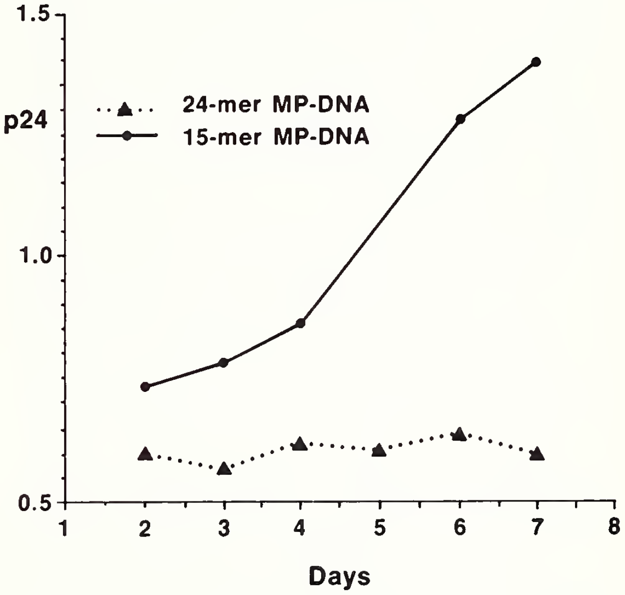

Figure 4. HIV replication inhibition plot. A human lymphocyte cell line permissive for HIV 1, i.e. H9, was used for these studies. On day 1, uninfected cells were mixed with infected cells in the wells of a microtiter plate in 0.3 ml of culture medium with either 15-mer or 24-mer antisense MP-DNA (15 μM). At each time point one well from each set was sampled and assayed for the viral marker protein, p24, by immunoassay. Viral levels in wells not containing antisense MP-DNA usually increased by 200 to 300 percent over this time interval. The 24-mer displayed essentially complete inhibition, whereas the 15-mer was ineffective.

MP-DNA, however, might maximize the properties of nuclease resistance and membrane permeability. Accordingly, our initial experiments involved the use of completely nonionic MP-DNA.

Purification and analysis of uncharged MP-DNA is difficult, since elimination of charge results in decreased solubility in physiological buffers and greater losses due to adsorption to surfaces. Commonly employed procedures for handling DNA are generally not applicable to MP-DNA. For example, completely nonionic oligomers cannot be radiolabelled by the enzyme, polynucleotide kinase, in a procedure used for monitoring electrophoretic migration of DNA on gels. In fact, these oligomers do not migrate on gels, eliminating the availability of electrophoresis for purification and analysis purposes. Instead, our laboratory has utilized a two-step reversed-phase HPLC procedure, i.e. trityl-on/trityl-off, for purification and analysis purposes; further details on the synthesis and purification of completely nonionic MP-DNA have been published.[21]

INHIBITION OF HIV-1

HIV-1 has become one of the most studied viruses and the entire genomic sequence of this retrovirus, including numerous variants, is known.[22] The HIV genome has characteristics common to all retroviruses (Figure 3), including an LTR (long terminal repeat) at either end of the provirus DNA and gag, pol, and env structural genes. The LTRs contain regulatory sequences including TAR (trans-activating responsive element). The gag (group specific antigens) proteins, p17, p24, and p7/p9, participate in the formation of the virion core. The three proteins encoded by the pol gene are: 1) a protease for processing the large gag-pol fusion protein into the individual protein products: 2) a reverse transcriptase for making a double-stranded DNA fragment based on the sequence of the single-stranded viral RNA; and 3) an endonuclease (integrase) for inserting this double-stranded proviral DNA into the host cell chromosome. The env gene encodes the envelope protein, gp120, that is responsible for binding to the CD_4 receptor, and the transmembrane protein, gp41, that anchors gp120 and may be involved in viral entry into the cell. In addition, the HIV genome encodes some unique regulatory proteins, tat, rev, nef, vif, vpu (or U), and vpr (or R).

Antisense therapy is among the many approaches being explored for AIDS, and one preferred target is the tat gene, since the tat protein has been shown to be critical for viral replication.[23] The target site for tat protein is TAR, but the exact mechanism(s) for transactivation has not been clarified. Several recent publications have appeared on the inhibition of HIV-1 using MP-DNA and other analogs that are antisense to the tat gene, as well as to other sites.[20,24-26] In our own cell culture studies, we have targeted the translational initiation region of the tat structural gene. A nonionic MP-DNA 24-mer, covering the initiation codon (AUG), as well as several upstream bases, showed total inhibitory activity at its solubility limit of 15 μM (Figure 4). This concentration is within the range found for backbone-modified antisense oligonucleotides in other studies (Table). Furthermore, inhibition was effective over test periods as long as ten days (data not shown), confirming the nuclease resistance of the MP-DNA. A 15-mer MP-DNA, antisense to the same region, was found not to be inhibitory when tested up to 60 μM. Presumably, the lower complementary binding affinity expected for a shorter oligomer was responsible for this result.

The selected data in the Table from the cell culture studies of Zamecnik and coworkers, illustrate several points. First, antisense DNA (compound 1) is itself active in this in vitro assay, but not with complete inhibition. Second, the use of backbone-modified DNA (compounds 2, 4, and 5) can achieve complete inhibition. The presence of only a few modified linkages (compound 3) or shorter sequences of MP-DNA (not shown) also gave only partial inhibition. Third, studies so far have provided only preliminary results and many questions remain. The nature of the enhanced antiviral activity of backbone-modified DNA, whether due to nuclease resistance, improved cellular uptake or some other process, has still not been determined. The apparent activity of compound 5 (a phosphorothioate having a sequence unrelated to the viral genome) suggests that other processes are operative. Toxicity toward the cellular host, most noticeable with compound 6, a phosphormorpholidate, also may play a role in the apparent antiviral effect. In more recent studies with phosphorothioate oligomers antisense to HIV-1, strong antiviral activity has been achieved, but not with any remarkable improvements in potency.[27,28] In still another approach, phosphate-methylated oligonucleotides, i.e. having the methyl group bound to the phosphorous atom through an oxygen atom rather than directly as in MP-DNA, were found to be inhibitory to HIV-1 at concentrations below 1 μM.[29]

FUTURE DIRECTIONS

From available literature, it is apparent that synthetic antisense DNA, especially backbone-modified, is active in the low micromolar range. At these levels, a therapeutic dose of MP-DNA in man might be on the order of 1 g. This would be quite a large quantity from both monetary and production viewpoints. The potency would have to be improved by at least two or three orders of magnitude to be practicable. This might be realized by using a DNA-drug that catalytically degrades numerous copies of the target strand. Stimulation of RNase digestion of a particular mRNA might achieve this purpose. Unfortunately, nonionic MP-DNA, not recognizable by enzymes, does not promote this process.[30] In a clever variation, another laboratory has demonstrated that an oligonucleotide with a specific distribution of phosphodiester and methylphosphonate bonds can activate RNase H degradation of a complementary RNA strand, while remaining nuclease resistant.[31] Alternatively, the use of an active pendant group on MP-DNA may provide the desired catalytic mechanism for enhanced potency. ■

REFERENCES

1. Green PJ, Pines O, Inouye M: The role of antisense RNA in gene regulation. *Ann Rev Biochem* 55:569-597, 1986.

2. Pestka S, Daugherty BL, Jung V, et al.: Anti-mRNA: Specific inhibition of translation of single mRNA molecules. *Proc Natl Acad Sci* 81:7525-7528, 1984.

3. Coleman J, Hirashima A, Inokuchi Y, et al.: A novel immune system against bacteriophage infection using complementary RNA (mic RNA). *Nature* 315:601-603, 1985.

4. Hirashima A, Sawaki S, Inokuchi Y, Inouye M: Engineering of the mRNA-interfering complementary RNA immune system against viral infection. *Proc Natl Acad Sci* 83:7726-7730, 1986.

5. Melton DA: Injected antisense RNAs specifically block messenger RNA translation in vivo. *Proc Natl Acad Sci* 82:144-148, 1985.

6. Izant JG, Weintraub H: Constitutive and conditional suppression of exogenous and endogenous genes by antisense RNA. *Science* 229:345-352, 1985.

7. Kim SK, Wold BJ: Stable reduction of thymidine kinase activity in cells expressing high levels of antisense RNA. *Cell* 42:129-138, 1985.

8. McGarry TJ, Lindquist S: Inhibition of heat shock protein synthesis by heat inducible antisense RNA. *Proc Natl Acad Sci* 83:399-403, 1986.

9. To RYL, Booth SC, Neiman PE: Inhibition of retroviral replication by antisense RNA. *Mol Cell Biol* 6:4758-4762, 1986.

10. Holt TJ, Gopal TV, Moulton AD, Nienhus P: Inducible production of c-fos antisense RNA inhibits 3T3 cell proliferation. *Proc Natl Acad Sci* 83:4794-4798, 1986.

11. De Benedetti A, Pytel BA, Baglioni C: Loss of (2′-5′) oligoadenylate synthetase activity by production of antisense RNA results in lack of protection by interferon from viral infections. *Proc Natl Acad Sci* 84:658-662, 1987.

12. Chang LJ, Stoltzfus CM: Inhibition of Rous sarcoma virus replication by antisense RNA. *J Virol* 61:921-924, 1987.

13. Stephenson ML, Zamecnik PC: Inhibition of Rous sarcoma viral RNA by a specific oligodeoxynucleotide. *Proc Natl Acad Sci* 75:285-288, 1978.

14. Wickstrom EL, Bacon TA, Gonzalez A, et al.: Human promyelocytic leukemia HL-60 cell proliferation and c-myc protein expression are inhibited by an antisense pentadecadeoxynucleotide targeted against c-myc mRNA. *Proc Natl Acad Sci* 85:1028-1032, 1988.

15. Zamecnik PC, Goodchild J, Taguchi Y, Sarin PS: Inhibition of replication and expression of human T-cell lymphotropic virus type III in cultured cells by exogenous synthetic oligonucleotides complementary to viral RNA. *Proc Natl Acad Sci* 83:4143-4146, 1986.

16. Dash P, Lotan I, Knapp M, Kandel ER: Selective elimination of mRNAs in vivo: Complementary oligodeoxynucleotides promote RNA degradation by an RNase H-like activity. *Proc Natl Acad Sci* 84:7896-7900, 1987.

17. Dreyer GB, Dervan PB: Sequence specific cleavage of single-stranded DNA: Oligodeoxynucleotide-EDTA-FE(II). *Proc Natl Acad Sci* 82:968-972, 1985.

18. Miller PS, McParland KB, Jayaraman K, Ts'o POP: Biochemical and biological effects of nonionic nucleic acid methylphosphonates. *Biochemistry* 20:1874-1880, 1981.

19. Zon G: Oligonucleotide analogues as potential chemotherapeutic agents. *Pharmaceutical Research* 5:539-549, 1988.

20. Sarin PS, Agrawal S, Civeira MP, et al.: Inhibition of acquired immunodeficiency syndrome virus by oligodeoxynucleoside methylphosphonates. *Proc Natl Acad Sci* 85:7448-7451, 1988.

21. Ebright YE, Tous GI, Tsao J, et al.: Chromatographic purification of nonionic methylphosphonate oligodeoxynucleosides. *J Liquid Chromatogr* 11:2005-2017, 1988.

22. Rabson AB: The molecular biology of HIV infection: Clues for possible therapy, in Levy JA, *AIDS Pathogeneis and Treatment*. New York, NY, Marcel Dekker, Inc., 1989, pp. 231-256.

23. Fisher AG, Feinberg M, Josephs SF, et al.: The trans-activator gene of HTLV-III is essential for virus replication. *Nature* 320:367-371, 1986.

24. Goodchild J, Agrawal S, Civeira MP, et al.: Inhibition of human immunodeficiency virus replication by antisense oligodeoxynucleotides. *Proc Natl Acad Sci* 85:5507-5511, 1988.

25. Agrawal S, Goodchild J, Civeira MP, et al.: Oligodeoxynucleoside phosphoamidates and phosphorothioates as inhibitors of human immunodeficiency virus. *Proc Natl Acad Sci* 85:7079-7083, 1988.

26. Zaia A, Rossi JJ, Murakawa GJ, et al.: Inhibition of human immunodeficiency virus by using an oligonucleoside methylphosphonate targeted to the tat-3 gene. *J Virology* 62:3914-3917, 1988.

27. Agrawal S, Ikeuchi T, Sun D, et al.: Inhibition of human immunodeficiency virus in early infected cells by antisense oligodeoxynucleotides and their phosphorothioate analogues. *Proc Natl Acad Sci* 86:7790-7794, 1989.

28. Matsukura M, Zon G, Shinozuka K, et al.: Regulation of viral expression of human immunodeficiency virus in vitro by an antisense phosphorothioate oligodeoxynucleotide against rev (art/trs) in chronically infected cells. *Proc Natl Acad Sci* 86:4244-4284, 1989.

29. Buck MH, Koole LH, Van Genderen MHP, et al.: Phosphatemethylated DNA aimed at HIV-1 RNA loops and integrated DNA inhibits viral infectivity. *Science* 248:208-212, 1990.

30. Walder JA: Antisense DNA and RNA: Progress and prospects. *Genes Dev* 2:502-504, 1988.

31. Quartin RS, Brakel CL, Wetmur JG: Number and distribution of methylphosphonate linkages in oligodeoxynucleotides affect exo- and endonuclease sensitivity and ability to form RNase H substrates. *Nucleic Acids Res* 17:7253-7262, 1989.

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Committee on Maternal and Child Care
(Joseph C. Lucci, Staff Liaison)

Thomas A. Noone, MD, *Chairman*	Haddonfield
Gerard F. Hansen, MD, *Vice-Chairman*	Hackensack
Peter A. Beaugard, MD	Flemington
Thomas F. Bejgrowicz, MD	Linden
Joseph L. DeStefano, MD	Atlantic City
Stephen M. Golden, MD	Summit
Caterina A. Gregori, MD	Livingston
John T. Harrigan, MD	New Brunswick
Thomas Hegyi, MD	New Brunswick
I. Mark Hiatt, MD	New Brunswick
Michael D. Horn, MD	Willingboro
Ruby P. Huttner, MD	Flemington
Glenn P. Lambert, MD	Flemington
Courtney M. Malcarney, MD	Collingswood
James P. Thompson, MD	Clifton
Audrey I. Prefer, MD	Bridgewater
Eric Bonifield, MD, *Resident Member*	Port Monmouth
Edith A. Goldie, *Student Member*	Roselle Park
George J. Halpin, MD, *Consultant*	Trenton

Committee on Medical Aspects of Sports
(Joseph C. Lucci, Staff Liaison)

Vincent K. McInerney, MD, *Chairman*	Paterson
Stuart A. Hirsch, MD, *Vice-Chairman*	Bridgewater
Allan M. Levy, MD, *Vice-Chairman*	Westwood
Steven G. Crawford, MD	Ocean Grove
Brian C. Halpern, MD	Princeton
Christine E. Haycock, MD	Newark
Timothy M. Hosea, MD	New Brunswick
Glenn P. Lambert, MD	Flemington
Richard Levandowski, MD	Pennington
Warren F. MacDonald, Jr, MD	Cape May Court House
Joseph P. Pizzurro, MD	Ridgewood
Walter Poprycz, MD	Haddonfield
Cheryl J. Rubin, MD	Bridgewater
Gary J. Savatsky, MD	Paramus
David I. Scott, MD	Piscataway
Aaron A. Sporn, MD	Mercerville
David A. Stone, MD	East Rutherford
Stephen C. Vanna, MD	Maple Shade
Ron Noy, *Student Member*	Fair Lawn
John Culberson, *Student Member*	Bridgewater
Abner West, *Consultant*	Short Hills
Donald Williams, *Consultant*	Pennington
Joyce Williams, *Consultant*	Pennington

New Jersey Health Care Committee
(Vincent A. Maressa, Staff Liaison)

Joseph A. Riggs, MD, *Chairman*	Haddon Heights
John C. Baker, MD	Northfield
Churchill L. Blakey, MD	Wenonah

John P. Capelli, MD	Haddonfield
Harry M. Carnes, MD	Audubon
William R. Chenitz, MD	Newark
Douglas M. Costabile, MD	Murray Hill
Palma E. Formica, MD	Old Bridge
Karl T. Franzoni, MD	Trenton
George T. Hare, MD	Haddon Heights
Robert R. Henderson, MD	Stanton
Paul J. Hirsch, MD	Bridgewater
Louis L. Keeler, MD	Haddon Heights
Joseph N. Micale, MD	North Bergen
Charles L. Moloney, MD	Moorestown
Walter J. Pedowitz, MD	Linden
Irving P. Ratner, MD	Willingboro
Robert S. Rigolosi, MD	Teaneck
Bernard Robins, MD	Union
Gerald H. Rozan, MD	Wayne
William E. Ryan, MD	Pennington
Richard H. Sharrett, MD	North Plainfield
Robert J. Weierman, MD	South Orange
Dino Madonna, *Student Member*	Piscataway

Committee on Physicians' Health
(David I. Canavan, MD, Staff Liaison)

Simon D. Murray, MD, *Chairman*	Princeton
Steven K. Allen, DO	Huntington Valley, PA
Robert Altin, MD	Cherry Hill
William J. Annitto, MD	Rancocas
James A. Barnshaw, MD	Princeton
Ann Beams	Cranford
Natalie I. Bilenki, MD	Morris Plains
Joseph Campagna, MD	Summit
David I. Canavan, MD	Lawrenceville
Ronald I. Forster, MD	Union
Daniel P. Greenfield, MD	Millburn
Boris G. Ivovich, MD	Annandale
Glenn Jacoby, MD	Bound Brook
Charles Kastenberg, DO	Cherry Hill
Thomas J. Liddy, MD	Livingston
Herbert J. McBride, MD	Toms River
Nancy McBride	Toms River
George J. Mellendick, MD	Perth Amboy
Joseph L. Mooney, MD	Trenton
John J. Naughton, DO	Cinnaminson
Rena Nora, MD	Edison
John J. Verdon, Jr, MD	Tinton Falls
Michael Sisack, *Student Member*	Oaklyn

Committee on Senior Citizens
(A. Ronald Rouse, Staff Liaison)

Ian Samson, MD, *Chairman*	Lakewood
Joseph W. Bitsack, MD	Hackensack
Churchill L. Blakey, MD	Wenonah
Donald J. Cinotti, MD	Jersey City
Natalio Damien, MD	Red Bank
Ralph J. Fioretti, MD	Rochelle Park
Harlan E. Hiramoto, MD	Bridgewater
Michael D. Horn, MD	Willingboro
Philip J. Jasper, MD	Passaic
Joseph J. Kinney, MD	Bridgewater
John P. Kohler, MD	Camden
A. Ralph Kristeller, MD	Millburn
Nancy L. Mueller, MD	Englewood
Emmons G. Paine, MD	Voorhees Township
Eugene R. Principato, MD	Cherry Hill
Marc I. Rothman, MD	Cherry Hill
Joseph J. Ryan, MD	Morristown
Robert I. Salasin, MD	Cape May Court House
Teresa Schaer, MD	New Brunswick
Andrew B. Weiss, MD	Roseland
William I. Weiss, MD	Livingston
Harry M. Woske, MD	Flemington
Brenda E. Holcomb-Simone, DO, *Resident Member*	Roselle Park
Michael Bavlsik, *Student Member*	Piscataway

William D. Kimler, MD, *Consultant*	Collingswood
Mary Jane Brubaker, *Consultant*	East Brunswick

Committee on Utilization Review Systems
(Vincent A. Maressa, Staff Liaison)

Robert J. Weierman, MD, *Chairman*	South Orange
George T. Hare, MD, *Vice-Chairman*	Haddon Heights
Malcolm G. Coblentz, MD	Livingston
Alfio G. Dal Pan, MD	Fair Lawn
Bernard Gardner, MD	Hackensack
Howard J. Goldson, MD	Bound Brook
Robert R. Henderson, MD	Stanton
A. Ralph Kristeller, MD	Millburn
Ralph J. Lewis, MD	New Brunswick
Eugene Joseph Lind, MD	West Orange
John J. LoCurto, Jr, MD	Hackensack
Vincent T. McDermott, Jr, MD	Audubon
Emmons G. Paine, MD	Voorhees Township
Irving P. Ratner, MD	Willingboro
Anthony M. Tonzola, MD	Westfield
Elias N. Tsoukas, MD	Ramsey

Committee on Women in Medicine
(A. Ronald Rouse, Staff Liaison)

Patricia G. Klein, MD, *Chairman*	Westwood
Mary Blome, MD	Englewood
Gertrude B. Brundage, MD	East Orange
Christina Y. Chao, MD	Medford
Leticia V. DeCastro, MD	Edison
Wendy Martinez, MD	Cherry Hill
Ligaya L. Prystowsky, MD	Passaic
Rose P. Prystowsky, MD	Nutley
Andrea I. Reznik, MD	Bridgewater
Celia G. Roque, MD	Cranford
Catherine E. Spears, MD	Chatham
Bessie M. Sullivan, MD	Edison
Carolyn W. Watson, MD	Glen Ridge
Suzanne A. Widrow, MD	Hanover
Edith A. Goldie, *Student Member*	Roselle Park
Diane Pege, *Student Member*	Newark

Committee on Young Physicians
(A. Ronald Rouse, Staff Liaison)

Joseph P. Calderone, Jr, MD, *Chairman*	Cranford
Timothy M. Hosea, MD, *Vice-Chairman*	New Brunswick
Dale E. Edlin, MD	Red Bank
Richard K. Gadon, MD	Hammonton
John E. Gatti, MD	Cherry Hill
Reid A. Lachman, MD	Morristown
David M. MacPeek, MD	Lakewood
James P. O'Neill, MD	Avon-by-the-Sea
Jorge A. Prieto, MD	Woodbury
Mark D. Schlesinger, MD	Hackensack
Bartholomew J. Tortella, MD	Newark
Stefano R. Tarantolo, MD, *Resident Member*	South Amboy
Joel Braver, *Student Member*	Somerset
Robert Schnitzlein, *Student Member*	Union

Task Force on AIDS
(A. Ronald Rouse, Staff Liaison)

Dennis P. Quinlan, MD, *Chairman*	South Orange
Theodore H. Bodner, MD	Hackensack
David J. Gocke, MD	New Brunswick
Alvin I. Kaplan, MD	Bound Brook
Anthony B. Minnefor, MD	Paterson
Charles J. Moloney, MD	Moorestown
Joseph J. O'Connor, MD	West Orange
Irving P. Ratner, MD	Willingboro
Paul H. Steel, MD	Atlantic City
Dorothy Espinola, *Auxiliary Member*	Washington
Pamela J. Costello, *Student Member*	Morristown
Richard Brennan, Esq, *Consultant*	Morristown

Ronnie Davidson, EdD, *Consultant*	Lawrenceville
Richard E. Dixon, MD, *Consultant*	Trenton
Thomas D. Farrell, *Consultant*	Trenton
Dorothy Flemming, MSN, RN, *Consultant*	Trenton
Gloria Gary, RN, *Consultant*	Princeton
Charles Heitzmann, *Consultant*	Lawrenceville
Edward Johnson, MD, *Consultant*	Newark
Rajendra Kapila, MD, *Consultant*	Newark
Stephen C. Kimler, MD, *Consultant*	Montclair
R. Don King, MD, *Consultant*	Newark
Florence Kortis, *Consultant*	Clifton
Marc Lory, *Consultant*	Newark
Otto G. Matheke, MD, *Consultant*	Newark
Frank Michalski, MD, *Consultant*	Teterboro
James Oleske, MD, *Consultant*	Newark
Elena Perez, *Consultant*	Newark
George Perez, MD, *Consultant*	Newark
John Sensakovic, MD, *Consultant*	Newark
Whaijen Soo, MD, PhD, *Consultant*	Nutley
Diane Stager, *Consultant*	Princeton
Anthony Tarasenko, MD, *Consultant*	Newark
Neil Williams, MD, *Consultant*	Trenton

GENERAL CALL TO MEMBERSHIP

The Committee on Appointments of the Medical Society of New Jersey will hold a meeting next month to consider nominations for all MSNJ committees and councils for the 1991-1992 administrative year. Should you wish to be considered for service on a committee or council, please contact:

Diana Gore
Medical Society of New Jersey
Two Princess Road
Lawrenceville, NJ 08648

609/896-1766

The Medical Society of New Jersey welcomes all inquiries concerning these committee and council positions, and welcomes all who wish to serve.

Whom To Call At MSNJ Headquarters

Executive Director: Vincent A. Maressa

Address changes	Joyce Guest
Advertising (in *NEW JERSEY MEDICINE)*	Joseph Cookson
AMA Delegation	Diana C. Gore
Annual Meeting	Eileen Pfeiffer
Auxiliary, MSNJ	Margaret Fransckiewich
Biomedical Ethics	June O'Hare
Blue Cross/Blue Shield	Joseph C. Lucci
Board of Trustees	Diana C. Gore
Continuing Medical Education	Martin E. Johnson
Council and Committee Appointments	Diana C. Gore
Credentials	Mary Hamer
Delegates, MSNJ	Eileen M. Pfeiffer
DRG	Vincent A. Maressa
Dues Payments: MSNJ and AMA	Mary Hamer
Eye Health Screening Program	Sue Arnone
Executive Committee	Diana C. Gore
Financial Operations	Arthur White
HMOs/IPAs/PPOs	Joseph C. Lucci
Hospital Medical Staff Relations	Diana C. Gore
House of Delegates	Diana C. Gore
JEMPAC	June O'Hare
Judicial Council	June O'Hare
Legal Services Plan	Joseph C. Lucci
Legal Questions	Vincent A. Maressa
Legislation	June O'Hare
Liaison Reps to other organizations	Diana C. Gore
Long-Range Planning Committee	Vincent A. Maressa
Loss Prevention, Risk Management	A. Ronald Rouse
Maternal and Newborn Record Books	Joyce Guest
Medical Assistants	Joseph C. Lucci
Medical Education	Martin E. Johnson
Medical Services	Joseph C. Lucci
Medical Student Loan Fund	Patricia Drakeford
Medicare/Medicaid	Joseph C. Lucci
Membership Benefits	Joseph C. Lucci
Membership Directory	Joyce Guest Arthur White
Membership Records	Mary Hamer
Mental Health	Joseph C. Lucci
NEW JERSEY MEDICINE	Geraldine Hutner
Nominating Committee	Diana C. Gore
Officers of MSNJ	Diana C. Gore
Peer Review Organization	Vincent A. Maressa
Physicians' Health Program	David I. Canavan, MD
Professional Liability Insurance	A. Ronald Rouse
Public Health	Joseph C. Lucci
Public Relations	Martin E. Johnson
Resident Association	A. Ronald Rouse
Resolutions for Annual Meeting	Diana C. Gore
Senior Citizen Projects	A. Ronald Rouse
Student Association	A. Ronald Rouse
Subscriptions, *NEW JERSEY MEDICINE*	Nancy M. Propsner
Third-Party Payor Complaints	Joseph C. Lucci
Widows and Orphans Program	Joyce Guest
Women Membership	A. Ronald Rouse

[redacted]

MSNJ LIAISON REPRESENTATIVES

Academy of Medicine of New Jersey
(1) Board of Trustees/Liaison Committee
(Liaison requested by Academy—June 19, 1966)

Sherman Garrison, MD	Bridgeton
Louis L. Keeler, MD	Haddon Heights
Edwin W. Messey, MD	Willingboro

(2) Postgraduate Medical Education Study Committee
(Representation requested by Academy—November 15, 1964)

Palma E. Formica, MD, *Chairman,* Committee on Medical Education	Old Bridge
David E. Swee, MD, *Member,* Committee on Medical Education	New Brunswick

AIDS Education and Training Center (RAETC) for Health Care Practitioners, New Jersey Regional
(Representation requested by UMDNJ—July 6, 1989)

Dominic A. Mauriello, MD	Jersey City

AMA-Education Research Foundation
(Liaison requested by AMA—October 7, 1951)

David J. Greifinger, MD, *Chairman,* Committee on Medical Student Loan Fund	Belleville

Appointments, Committee on
(Established by Board of Trustees—November 20, 1988)

Joseph A. Riggs, MD, *Chairman*	Haddon Heights
Douglas M. Costabile, MD	Murray Hill
William E. Ryan, MD	Pennington

Archivist-Historian
(Appointment requested by Medical History Society of New Jersey—April 1982)

Morris H. Saffron, MD	New York, NY

Audit Review Committee
(Appointed annually to review previous year's audit)

Joel S. Cherashore, MD, *Chairman*	Nutley
Edwin W. Messey, MD	Willingboro
Fred M. Palace, MD	Morristown
Gerald H. Rozan, MD, *Consultant*	Wayne
Matis A. Fermaglich, MD, *Chairman,* Committee on Finance and Budget, *Consultant*	Teaneck
Angelo S. Agro, MD, *Vice-Chairman,* Committee on Finance and Budget, *Consultant*	Haddonfield
Michael M. Heeg, MD, *Vice-Chairman,* Committee on Finance and Budget, *Consultant*	Trenton

Blindness—New Jersey, National Society To Prevent
(Requested by the National Society To Prevent Blindness-New Jersey—March 19, 1978)

Alfonse A. Cinotti, MD, *Chairman,* Committee on Conservation of Vision	Jersey City

Blood Bank Association, New Jersey
(Liaison requested by New Jersey Blood Bank Association—April 25, 1969)

Frank Campo, MD	Trenton

Blood Banking Task Force for New Jersey
(UMDNJ—October 1981)

Frank Campo, MD	Trenton

Cancer Plan, Task Force To Facilitate the Development of a Statewide
(Representation requested by New Jersey State Department of Health, Division of Epidemiology and Disease Control—September 11, 1990)

Paul E. Wallner, DO	Camden

Clinical Laboratory Licensing Review Panel
(Representation requested by New Jersey State Department of Health, Clinical Laboratory Improvement Service—August 14, 1989)

Bernard Robins, MD	Union
William E. Ryan, MD	Pennington

Dental Health, State Task Force for Better
(Representation requested by New Jersey State Department of Health—January 30, 1985)

Glenn P. Lambert, MD	Flemington

Diabetes Coordinating Council
(Representation requested by New Jersey State Department of Health—November 10, 1980)

Arthur Krosnick, MD	Princeton

Drug and Alcohol Problems, Statewide Committee To Assist Local School Districts with
(Representation requested by New Jersey State Department of Education, Regional Curriculum Services Unit-South—June 4, 1984)

Ed Reading, MDiv	Lawrenceville

Drug Utilization Review Council, New Jersey
(Representation requested by New Jersey State Department of Health—December 19, 1984)

Harry M. Woske, MD	Flemington

Education, New Jersey State Department of
(Liaison requested by assistant commissioner of education—September 21, 1958)

Glenn P. Lambert, MD	Flemington

Emergency Medical Personnel and Hospitals, Division on Women Training Program for
(Representation requested by NJ State Department of Community Affairs, Division on Women—August 2, 1984)

Rudolf E. Schwaeble, MD	Mendham

Executive Committee
(Provided in the bylaws, chapter III (c))

Douglas M. Costabile, MD, *President*	Murray Hill
Joseph A. Riggs, MD, *President-Elect*	Haddon Heights
William E. Ryan, MD, *First Vice-President*	Pennington
Joseph N. Micale, MD, *Second Vice-President*	North Bergen
Paul J. Hirsch, MD, *Immediate Past-President*	Bridgewater
Bernard Robins, MD, *Secretary*	Union
Gerald H. Rozan, MD, *Treasurer*	Wayne

Graduate Medical Education, Advisory Council on
(Representation requested by UMDNJ—1979)

Stephen F. Wang, MD	Morristown

Health Care Administration Board
(Representation appointed by MSNJ—July 1983)

A. Ronald Rouse	Lawrenceville

Health Maintenance Organization Projects, Advisory Committee To Participate in the Review of
(Recommended to executive director, Statewide Health Coordinating Council, New Jersey State Department of Health—1974)

Henry J. Mineur, MD	Westfield

Hospital Association, New Jersey
(Liaison established at request of New Jersey Hospital Association—December 17, 1967)

Fred M. Palace, MD	Morristown

Hospital Medical Staff Section, Governing Council
(Hospital Medical Staff Section established by 1984 House of Delegates)

George T. Hare, MD, *Chairman*	Haddon Heights
Angelo S. Agro, MD, *Vice-Chairman*	Haddonfield
Carlo Porcaro, MD, *Secretary*	Newark
Francis J. Lumia, MD, *Delegate*	Allentown
Robert L. Wegryn, MD, *Alternate Delegate*	Elizabeth
Harold R. Reeve, MD, *Member-at-Large*	Mount Holly
J. Jerome Cohen, MD, *Member-at-Large*	Lakewood
Harold S. Yood, MD, *Immediate Past-Chairman*	Plainfield
Diana C. Gore, *MSNJ Staff Liaison*	Lawrenceville

JEMPAC, Conference Committee with
(Established at request of JEMPAC—June 25, 1967)

Irving P. Ratner, MD, *Chairman,* Council on Legislation	Willingboro
Richard H. Sharrett, MD, *Chairman,* Council on Medical Services	North Plainfield
Joseph N. Micale, MD, *Second Vice-President*	North Bergen

Legislation
(1) Federal Keyman (Mechanism established by MSNJ—April 4, 1954—to serve as official intermediaries between MSNJ and the federal legislators): 14 Congressional District Keymen and 2 Senatorial Keymen.

(2) State Keymen (Mechanism established by MSNJ—July 13, 1952): Keymen in 40 Legislative Districts/21 Component Societies.

Medical Assistance Advisory Council
(Established at the request of the New Jersey State Department of Human Services—1980)

James Q. Atkinson, MD	Vincentown
Thomas S. Bellavia, MD	Hasbrouck Heights

Medical Assistants, New Jersey Society of
(Liaison requested by Society—September 15, 1963)

Giovanni Lima, MD	Kearny
Joseph C. Lucci, *MSNJ Staff Liaison*	Lawrenceville

Medical Liaison Committees
(High-level conference groups for discussion and consideration of items of mutual interest)

Douglas M. Costabile, MD, *President*	Murray Hill
Joseph A. Riggs, MD, *President-Elect*	Haddon Heights
William E. Ryan, MD, *First Vice-President*	Pennington
Joseph N. Micale, MD, *Second Vice-President*	North Bergen
Paul J. Hirsch, MD, *Immediate Past-President*	Bridgewater
Bernard Robins, MD, *Secretary*	Union
Gerald H. Rozan, MD, *Treasurer*	Wayne
Vincent A. Maressa, *Executive Director, MSNJ*	Lawrenceville

(1) Medical-Dental
(Liaison requested by Dental Society—June 10, 1951)
(2) Medical-Hospital
(Liaison established by MSNJ—October 25, 1953)
(3) Medical-Legal
(Liaison established by MSNJ—October 25, 1953)
(4) Medical-Nursing
(Liaison established by MSNJ—April 4, 1954)
(5) Medical-Osteopathic
(Liaison established by Osteopathic Association—September 17, 1961)
(6) Medical-Pharmaceutical
(Liaison requested by MSNJ—July 26, 1953)

Medicare Physicians Advisory Council
(Representation requested by Pennsylvania Blue Shield—July 15, 1990)

Louis L. Keeler, MD	Haddon Heights
Richard H. Sharrett, MD	North Plainfield
R. Gregory Sachs, MD	Summit
Ian Samson, MD	Lakewood

Mental Retardation, Governor's Council on the Prevention of
(Appointed by the Governor—June 22, 1984)

Stanley S. Bergen, Jr, MD	Newark

Nursing Advisory Committee, New Jersey State Department of Health

John S. Madara, MD	Salem

Nursing Models Incentive Reimbursement Program Proposals Review Panel
(Representation requested by the New Jersey State Department of Health—July 12, 1989)

Vincent A. Maressa .... Lawrenceville

Osteopathic Physicians and Surgeons, New Jersey Association of

(Invitation to attend Board meetings extended to MSNJ president—July 24, 1986)

Douglas M. Costabile, MD, *President* .... Murray Hill

Pharmaceutical Assistance to the Aged and Disabled Advisory Council

(Appointed by commissioner of the New Jersey State Department of Human Services—physician representation requested by Division of Medical Assistance and Health Services—December 19, 1980)

Frank J. Malta, MD .... Toms River

Pharmacopeial Convention, The United States

(Delegate authorized to be seated—August 1988)

Joseph N. Micale, MD .... North Bergen

Poison Information and Education System, Advisory Board to New Jersey

(Representation requested by New Jersey State Department of Health—January 21, 1983)

Rudolf E. Schwaeble, MD .... Mendham

Radiation Protection, Advisory Committee on Nuclear Medicine to New Jersey Commission on

(Consultants in nuclear medicine appointed by Commission—November 20, 1966)

Henry J. Powsner, MD .... Princeton

Radiation Protection, Ad Hoc Committee on Educational Project of the Commission on

(Appointed by Board of Trustees—November 20, 1988)

Carl Restivo, Jr, MD .... Jersey City

Radiation Protection, Consultant Serving New Jersey Commission on

(Nomination for appointment to Commission requested March 17, 1963)

Frank Gingerelli, MD .... Hackensack

Resolutions, Committee on Annual Meeting

(Established by Board of Trustees—July 18, 1971—to review all resolutions in advance of the Annual Meeting)

Harry M. Carnes, MD, *Chairman* .... Audubon
Palma E. Formica, MD .... Old Bridge
Paul J. Hirsch, MD .... Bridgewater

Safety Council, New Jersey State

(Provided in Council bylaws—1962)

Douglas M. Costabile, MD, *President* .... Murray Hill

Society for the Assistance of New Jersey Physicians and their Families, The

(Liaison requested by Society—May 17, 1959)

Joseph R. Jehl, MD .... Clifton

State Board of Medical Examiners

(Trustees designated to attend monthly meetings on a rotating basis—per Board of Trustees, December 15, 1974, and per Board of Trustees, August 8, 1979)

Martin E. Johnson .... Lawrenceville

Statewide Health Coordinating Council (SHCC) and/or its Review Committee

(Liaison established January 15, 1978—appointed by president of MSNJ)

A. Ronald Rouse .... Lawrenceville

UMDNJ, Foundation of the

(MSNJ representative appointed yearly by the Board of Trustees to serve as a trustee, pursuant to the bylaws of the Foundation—1979)

Arthur Bernstein, MD .... South Orange

Waste Management, Advisory Council on Solid

(Appointed by governor—April 1989)

Stanley R. Lane, MD .... Moorestown

Second in a series

Why are your health care costs going up?

DRG'S ARE COSTING YOU MONEY.

A patient is hospitalized with a routine kidney problem. Four days later he's released, with hospital charges totaling just over $5,000. But the bill his insurance company receives *and pays for* amounts to over $52,000!

A second patient has a stone removed from her bile duct, an endoscopic procedure which requires only an overnight stay. But the hospital bill she receives amounts to $6,500.

What could account for such excessive charges? The answer is DRG's (diagnosis-related groups).

An experiment that failed

When government introduced DRG's in the early 1980's, they were hailed as the answer to the spiraling cost of hospital (not physician) care in New Jersey. By having insurers pay a standardized amount based on the patient's medical diagnosis, DRG's were supposed to bring fairness and cost efficiency to a situation that had few structured controls. A decade later, they have failed to do either.

In fact, because of its complexity, the DRG payment system often serves to bring about the very situations it was designed to prevent. The kind where a routine medical procedure can end up costing more than 10 times the actual charges.

You pay the tab

The reason for the excessive charges in the first case described above was a "markup factor" imposed to keep merging or closing hospitals afloat while they're winding down their affairs. In the second case, the inflated costs resulted from the system's inability to respond to newer, less expensive, health care delivery systems developed by physicians.

Regardless of the reasons, someone has to pay. Unfortunately that someone is you, the employer or private individual, who feels the squeeze in the form of higher and higher insurance premiums.

Time for action

Let's face it! DRG's have not controlled the cost of care. And by trying to standardize payment according to diagnosis, they haven't assured quality patient care either. The time has come to put an end to the DRG program and to return to treating patients as individuals. To find out more, write to us at the address listed below.

Why are your health care costs going up?
The Medical Society of New Jersey

Your County Medical Society and
The Medical Society of New Jersey
2 Princess Road • Lawrenceville, NJ 08648

NOTEBOOK

TRUSTEES' MINUTES

A regular meeting of the Board of Trustees was held on October 21, 1990, at the executive offices in Lawrenceville. Detailed minutes are on file with the secretary of your county society; a summary of significant actions follows:

Report of the President . . .
(1) JEMPAC Membership. . . Voted to continue its unanimous participation in JEMPAC, with the suggestion by Dr. Riggs that all leaders of county societies be encouraged to join.
(2) Unified AMA Membership . . . Noted that 1,000 members (out of 20,000) dropped from membership in the Pennsylvania Medical Society due to the unification issue.

Report of Executive Director . . .
(1) MSNJ Membership . . . Was provided with the listing of various categories of membership in MSNJ by county.
(2) MSNJ Financial Statements . . . Reviewed and approved the financial statements for the period ending August 31, 1990.
(3) Litigation . . . Noted the following: decision in the medical malpractice surcharge case (MSNJ versus Merin) is expected by the end of November; oral argument for the no-fault litigation still is pending.
(4) AMA Activities . . . Noted the following: a letter will be sent to President Bush requesting the resignation of Inspector General Richard Kusserow; Pennsylvania Medical Society is challenging the Medicare mandatory participation law; in regards to the antitrust case brought by the California Medical Society under the Health Care Quality Improvement Act of 1986, Mr. Maressa stated that there is security for the physician community in federal and state laws on immunity as long as physicians perform in a probative, reasonable fashion.
(5) Clinical Laboratory Improvement Amendments (CLIA) 1988 . . . Will be advised on all developments regarding the proposed regulations; in view of the comments received by HCFA on the proposed regulatory revisions related to physician office laboratories, it is likely that there will be serious revisions to the proposed regulations.

6) Assistants at Surgery (Medicare) . . . Noted that virtually all of the issues regarding assistants at surgery have been satisfactorily resolved, with the exception of certain hernia procedures that still are under discussion.

(7) Medical Inter-Insurance Exchange of New Jersey . . . Heard new MIIENJ malpractice rates for 1991: classes J, K, and N will enjoy a 9.67 percent decrease. All other classes will remain at their 1990 levels, and the subordinated loan requirement for new insureds will be suspended as the Board of Governors petitions the insurance commissioner for permission to begin redeeming outstanding subordinated loans.

(8) Medicare Fees . . . Heard from Mr. Maressa that 20 of New Jersey's 21 counties participate in the Senior Citizens Task Force and that information from Pennsylvania Blue Shield indicates that 75 percent of all claims in New Jersey are processed on an assignment basis. Also, noted the Council on Public Relations is releasing three or four publications on the Medicare issue and that MSNJ will hold an all-out lobbying effort to contain mandatory assignment legislation.

Special Reports . . . Received reports from the University of Medicine and Dentistry and from the New Jersey Hospital Association.

AMA Activities . . . Heard from AMA Trustee Palma E. Formica, MD, on the following: regional AMA meetings with state society presidents, executives, and AMA delegates are to be scheduled; a new AMA committee to review the activities, policies, and procedures of the AMA Board is in place; Dr. Formica is a member of the Nominating Committee, the Awards Committee, and Secretary of the AMA-ERF, and in January will be an AMA commissioner to the Joint Commission on Accreditation of Health Care Organizations; decrease in New Jersey AMA members; MSNJ member Nancy E. Gary, MD, is senior medical advisor of the Health Care Financing Administration; AMA has taken a vigorous stand in support of using animals in laboratory research; and FEDNET will be continued with an initial cost of $140.

Committee on Biomedical Ethics . . . Unanimously approved the following:

That the Medical Society of New Jersey endorse the Advance Directives for

Health Care brochure, which will be made available to citizens and institutions throughout the state.

Committee on Utilization Review Systems . . . Approved the following two recommendations:

That the Board of Trustees instruct the AMA Delegation to introduce a resolution at the 1990 Interim Meeting, asking the AMA to petition HCFA to revoke existing regulations which require preadmission/preprocedure approval.

That the New Jersey Congressional Delegation be urged to support the efforts of the medical community to revoke existing HCFA regulations which require preadmission/preprocedure approval.

Committee on Publication . . . Approved the following:

That the Board of Trustees approve the renewal of Trentypo, Inc. and Mack/Hughes Printing for the 1991-1992 production of *NEW JERSEY MEDICINE,* and that a study of paper grades and costs be initiated.

State Board of Medical Examiners . . . Noted the following report from Michael B. Grossman, DO, SBME president: retirement of public member Ruth Ballou from SBME; regulations to direct the activities of the review panel as stated in the Professional Medical Conduct Reform Act of 1989 are in draft phase; panels of consultants will be necessary due to the escalating volume of cases; SBME and MSNJ are in agreement that all physical therapy should be prescribed by a physician; and a report by the Task Force Investigating the Impact of Third-Party Payors under the chairmanship of Frank J. Malta, MD, is forthcoming.

New Business . . . Decided the following matters: from Bergen County Medical Society—denied request for funding to assist with Annual Meeting expenditures; and will investigate cost and feasibility of an 800 number for MSNJ; from Morris County Medical Society—referred to the Judicial Council for review and recommendation the matter requesting MSNJ to address the issue of how county medical societies can deal with the growing expenses involved in administering their regulations; and approved formal liaison with the New Jersey Pediatric Society. ☐

UMDNJ NOTES

International Training Program Established. A $2.25 million gift from a Swiss charitable foundation will create the first international program to train health care professionals to treat children with AIDS and also will benefit pediatric AIDS research in Newark. The program will be operated by UMDNJ-New Jersey Medical School and Children's Hospital at United Hospitals Medical Center. The gift, from the Association Francois-Xavier Bagnoud, also will endow an academic chair at the medical school for Dr. James M. Oleske, a professor of pediatrics and an internationally recognized researcher and clinician who was one of the first to identify the AIDS virus in children. Dr. Oleske will be the program medical director.

CABM Dedicated at Piscataway Campus. Governor Jim Florio joined industry executives and academic officials to dedicate the new Center for Advanced Biotechnology and Medicine (CABM) in Piscataway. The event marked the completion of New Jersey's premier facility devoted to medical advances through research in molecular biology. CABM, a joint project of Rutgers and UMDNJ and a principal program of the New Jersey Commission on Science and Technology, sponsors 11 advanced technology research centers on university campuses throughout the state. Constructed at a cost of $30 million, the 112,000-square-foot CABM facility eventually will house 180 reseachers and staff members working to understand the causes and cures for such serious illnesses as cancer, AIDS, and Alzheimer's disease.

Hard Work Poses No Risk To Fetus. Although women in physically strenuous jobs often feel compelled to reduce their activities during pregnancy, a new study of pregnant hospital physicians found that long hours in a stressful occupation posed no risk to the developing fetus.

The study, published in *The New England Journal of Medicine,* was conducted by Dr. George C. Rhoads, endowed professor of public health at UMDNJ-Robert Wood Johnson Medical School, and researchers from the National Institute of Child Health and Human Development and the David and Lucille Packard Foundation.

Device Helps Deaf Obtain Dental Care. UMDNJ has installed a Telecommunications Device for the Deaf (TDD) telephone line, becoming only the second health sciences institution in the nation to offer this service. This device allows deaf and hearing-impaired patients to communicate with the UMDNJ-New Jersey Dental School, Newark, without the use of a deaf contact or hearing person. The TDD consists of a typewriter keyboard and video monitor connected to the phone line. Both the caller and receiver communicate by typing messages back and forth. The dental school TDD number is 201/504-7751.

Surgery Helps Children with Facial Deformities. Children with facial defects caused by congenital conditions now can receive help from the Craniofacial Reconstruction Program—the first of its kind in the state—at UMDNJ-Robert Wood Johnson Medical School, New Brunswick.

Neurosurgeons and plastic surgeons in the new program literally can reshape the skulls of children born with abnormalities associated with such congenital conditions as Down's and Apert's syndromes.

Craniofacial reconstruction can repair defects such as bulging eyes and foreheads and misshapen skulls. The program is aimed at children; however, adults who have been disfigured from trauma and cancer also can be treated. □ Stanley S. Bergen, Jr., MD

PRESIDENTIAL ADDRESS

The following speech was written by Paul J. Hirsch, MD, upon completion of his term as MSNJ president:

I feel privileged and honored to address you today, and to report to you on our activities during the past year.

We have continued to follow our mission as indicated in the constitution of the Medical Society of New Jersey: "To promote the betterment of the public health . . . to enlighten public opinion . . . and to safeguard the rights of the practitioners of medicine."

Very few of the activities of any organization begin and end neatly within the organizational year. During the past year, the Medical Society of New Jersey has initiated some programs, concluded others, and remains in the midst of many more.

We are vitally concerned about the potential crisis in health care in our state and in the nation. The number of patients in New Jersey with AIDS continues to climb tragically. Our Task Force on AIDS continues to grapple with the important and sensitive issues that arise from this awful disease, a disease that presents us with the greatest public health challenge we now face. We believe that the public does not understand the immensity and the enormity of the tragedy that awaits us, in loss of life, human suffering, and economic costs.

Even now, there is a shortage of physicians available to treat AIDS patients, and to treat some other disadvantaged patient groups. In part, this relates to the lack of funding for medical care for these groups, thereby depriving them of accessible medical care. Our Task Force on Patient Care for the Under-Insured even now is developing strategies to deal with this situation.

In New Jersey, there also is a shortage of nursing and other health care workers. We continue to deal with this problem, and to evaluate potential solutions, through our Task Force on the Shortage of Nurses and Technical Personnel.

Our environment very directly affects the health of our citizens and the quality of life in New Jersey. Our Committee on Environmental Health has become a respected voice among those concerned with the destruction that man may wreck on the land, the water, and the air we breathe.

Your Medical Society continues to represent our profession on these and other important issues, in the councils of state and national government.

In order to effectively represent the physicians of New Jersey, we must avoid fragmentation of our profession, and we must broaden our ranks. Last year, I promised this House of Delegates that we would give meaningful participation within our organization to other physician groups. Your Board of Trustees has taken specific steps to accomplish this goal. We have provided observer status on our Board, for a representative from the specialty societies, and for a representative from the New Jersey Hospital Medical Staff Section. We believe that these additional voices have strengthened our Medical Society. This trial program has been so effective that the Board now has referred this to the Committee on Constitution and Bylaws, to formalize this relationship.

Your Board of Trustees has discussed the potential fragmentation of physicians that would occur with so-called unified, or mandatory, membership in the American Medical Association. The Board is opposed to mandatory AMA membership while encouraging voluntary membership in our national organization. We believe that any program of mandated membership will be harmful to the Medical Society of New Jersey, harmful to the American Medical Association, and harmful to our profession. This House of Delegates has rejected mandatory membership in the past. It has recognized the problems that other states have faced and continue to face through this onerous program. I hope that mandatory membership will not be an issue in New Jersey in the future; and if it is, I will personally oppose and fight it.

One of the most important goals of our Board of Trustees has been to revitalize and organize our process of long-range or strategic planning. In my inaugural address, I promised we would make progress in this effort, and that I would report to you at this time.

Long-range planning is essential if an organization is to recognize its needs, identify alternatives, and plan for the use of finite resources to attain its goals.

Strategic planning is a process of dealing with today's problems today, so that we will be ready to deal with tomorrow's problems. It is a process of programming change, to maintain our options. It is a process of recognizing patterns, to provide continuity and consistency. It is a process by which we adopt careful planning, and avoid reactive tactics.

During this past year, the Committee on Long-Range Planning developed a strategic plan to guide this Medical Society as we face our future challenges. The Committee and the Board of Trustees held a retreat to review and discuss this plan, which has now been adopted by the Board.

But, the process is not complete, and never will be: this is a living document, and it will be re-evaluated and modified as required. The Board of Trustees will use this plan as a guide to policy, and in the development of programs.

Communication with our membership is a major priority of this Medical Society. We believe that this communication has improved and will continue to make this effort. We have communicated through our standard measures, through increased frequency and distribution of the *MSNJ Hotline*, with frequent communications regarding current issues, and with the "Newswatch" page added to *NEW JERSEY MEDICINE*. The leadership conference in November was a great success, and provided an opportunity to review programs and policies, between meetings of the House of Delegates. We have adopted a plan that we hope will provide FAX machines for every county medical society office, to improve the speed and frequency of communications to these essential components of our organization.

Health policy is an overwhelming concern of the Medical Society of New Jersey. It is only by involvement in the formulation of health policy, and related public policy, that we can truly defend and advance the cause of accessible quality care for our patients.

The Board of Trustees is committed to political activity. This past year, your Board was proud to attain 100 percent membership in JEMPAC, and we urge similar commitment from each of you.

During the past year, the Medical Society's legislative and regulatory initiatives have continued.

The Board of Trustees held a state legislative seminar to meet with leaders of our state legislature and to discuss our mutual concerns.

The executive committee traveled to Washington, and met with many of our legislators, and with the health aides of every senator and congressman from New Jersey. We already have seen direct benefits of these meetings, and this expanding program will provide increasing benefits in the years to come.

We have learned that we can be most effective when we set priorities, and use our resources in those areas most important to us and to our patients.

Some of these priorities are evident.

Any proposal requiring mandatory assignment of Medicare claims will decrease the access to care of our senior citizens, and decrease the quality of the care available to them. We are constantly ready to meet this challenge. We have defeated it in the past and will win again in the future.

We oppose the expansion of license and scope of practice of other health workers through legislation and regulation, rather than by education. We oppose this in all instances and will continue to fight every such battle.

Tort reform continues to be a priority for your Medical Society, as well as the Medical Inter-Insurance Exchange of New Jersey.

During this past year, we have been particularly pleased with our success in markedly reducing the medical waste regulation fee for most physicians, from $528 to $100. This measure alone will save for each member of our Society a dollar amount greater than our annual dues.

We also have been pleased with the success of the Codey legislation for physician licensure reform, that accomplished virtually all of our goals; and we will continue to pursue further improvements in the law.

Litigation increasingly has played a role in our efforts on your behalf. Litigation, with its uncertain outcome, always is a last resort. But we will not hesitate to use this mechanism to protect the rights of the physicians of New Jersey.

We continue to litigate against the insurance commissioner with regard to the outrageous professional liability surcharge. Our initial efforts resulted in a 50 percent decrease in this surcharge for most of our members, from 5 percent to 2½ percent. But, we will not rest until we have eliminated this unfair, unreasonable tax on our membership.

We have continued our litigation against the State Board of Physical Therapy, to prevent the expansion of practice of physical therapists into areas for which their education does not prepare them. We won this battle in the lower courts; we now continue it at the Supreme Court level.

Reluctantly, we are involved in litigation with the PRO to protect the full rights of our membership to legal counsel and legal representation at all stages of inquiry by the PRO.

During the past year, the Medical Society of New Jersey has had ongoing meetings with Pennsylvania Blue Shield, and the Health Care Financing Administration (HCFA), to iron out difficulties between Pennsylvania Blue Shield and the physicians. Some problems have improved significantly; others have not been resolved. We will continue to work on your behalf in this area. In order to do so, you must bring your problems to the attention of the Medical Society, and we urge that you contact the office of Joseph Lucci with specific problems and details as they arise.

Physician assistants are once again, and still, an issue for us to face. The Medical Society has spent more than a decade opposing—correctly, I believe—the concept of the so-called physician assistant. This historically has been a proposal for a physician surrogate, not an assistant. On this basis, our House of Delegates, in an emergency session, opposed this concept; and we have continued to oppose it. I am proud that New Jersey, alone among all 50 states,

[redacted]

has no licensed physician assistants.

Our position has not changed. But, the proposal has changed, and the arena in which it is discussed has changed.

The concept of physician assistants previously has arisen in the Legislature. It now has been placed within the realm of the State Board of Medical Examiners. There is no longer a question of "licensing" physician assistants; it is now a matter of "delegation" for an assistant to function through the license of the doctor, and now as a true assistant rather than a surrogate.

The State Board of Medical Examiners has indicated its intention to proceed with some form of physician assistants in New Jersey. And, many of our members, many members of this House of Delegates, now are requesting additional ancillary personnel.

This then has been the decision facing us. Not: Do we oppose physician assistants? We do! Rather: Should we participate and negotiate within this process, in order to have a meaningful impact on the outcome? I believe we must!

We must participate; we must play a role; we must guide this process. I do not believe that the Medical Society of New Jersey can stand aside in any debate involving our profession or the health of our patients. We must insist upon regulation of these assistants that would provide additional protection for our patients. We believe that any trial in the use of physician assistants must be limited to a pilot study, and the scope of their responsibilities meaningfully restricted to protect the welfare of our patients. If there are to be physician assistants, they must assist physicians, not replace them.

Your officers and the Board of Trustees need the guidance and direction of this House of Delegates. But, I ask that you not tie the hands of your elected representatives, by forbidding any response to the challenges before us, by forbidding negotiation on your behalf. You should not prohibit the participation of the Medical Society of New Jersey in the regulatory process that is occurring. Allow your elected leadership to work on your behalf, on behalf of the physicians of New Jersey, to obtain the best of all possible regulatory programs.

One of the finest actions of the Medical Society of New Jersey has been the formation of a professional liability insurance company: really two companies, MIIENJ and its "management" company, the New Jersey State Medical Underwriters. We are proud of the financial strength of MIIENJ, and proud that this company could recently return an 11 percent refund on the 1978 premium year, and proud that premiums have remained level for the past three years, without an increase, and indeed with a small reduction in premium for the current year.

During the past year, the members of the Board of Directors of the Underwriters, and the Board of Governors of MIIENJ, agreed that we should re-evaluate the claims management approach and activity. An outside consulting firm performed a study, and has recommended programs and policies to enhance and improve our insurance company.

The report has been dealt with forthrightly and honestly, and will benefit the insureds of the company and the members of this society.

In order to add to the strength and depth of the company, and to the relationship of "our insurance company" with the Medical Society of New Jersey, the Board of Trustees has added five new members to the Board of Directors of the New Jersey State Medical Underwriters. In some other states, the ties between a state medical society and the professional liability carrier it formed, have been weakened, in some states, a hostile or antagonistic relationship has developed. That will not happen in New Jersey.

If MIIENJ and the Underwriters have required a great deal of the time and attention of the Board of Trustees during the past year, another of our important programs has required virtually none. The Physicians Health Program, under the guidance and leadership of David Canavan, MD, is the finest such program in this country today. It is the standard that all other state programs seek to emulate. This program saves lives and careers, protects and benefits our members, and protects the public. It is a service we provide not only for our members but for all physicians, and a service we provide for the citizens of New Jersey.

In conclusion, may I express my personal gratitude for the privilege of having served as president of this Medical Society; my gratitude to the Board of Trustees for their support, their work, their dedication to their tasks; my gratitude to this House of Delegates, of which I have been a member for so many years, which I remain a part of, and which I hope to remain with, for many, many years.

I appreciate your efforts, and your concerns, and I appreciate your trust and confidence in me. To each of you I say thank you for your support, thank you for your guidance, and thank you for your friendship. ☐

NEW MEMBERS

The Medical Society of New Jersey would like to welcome the following new members:

Bergen County
Lewis M. Attas, MD
Robert L. Berkowitz, MD
Raymond D. Reiter, MD
Samuel J. Snyder, MD
Reynol Suarez, MD

Burlington County
Barbara A. Bernstein, MD
Christopher J. Boynton, MD
Daniel A. D'Auria, MD

Joseph J. Heether, MD
Elizabeth A. Paczolt, MD
Raul A. Trillo, Jr, MD
Susan Trillo, MD

Camden County
David L. Clair, MD
Michael B. Herlich, MD
Christina G. Rehm, MD
Samuel I. Sarmiento, MD
Jeffrey M. Wahl, MD

Cape May
Mahaveer P. Prabhakar, MD

Essex County
Kevin R. Free, MD
Terrance H. Lee, MD
Steven M. Lomazow, MD
Calvin C. Matthews, MD
Eric Munoz, MD
Jules Pean, MD
Leon N. Sussman, MD
Robert F. Traflet, MD
David S. Zakheim, MD

Hudson County
Yodalio Cabaleiro, MD
Juan A. Gonzalez, MD
Isabelle M. Thomas, MD
Richard Valdesuso, MD

Hunterdon County
Salvatore J. D'Angio, MD

Mercer County
Ramon T. Bobila, MD
Robert A. Donohue, MD
Dan R. Gerstenblitt, MD
Richard D. Gordon, MD
George F. Gushue, DO
Charles N. Jeck, DO
Wayne S. Kubal, MD
Ronald W. Li, MD
Hank R. Lubin, MD
Robert F. Meirowitz, MD
Denise K. Shusterman, MD
Bruce Siegel, MD
Jaya Subramoni, MD
John D. Tydings, MD
Robert H. Wood, MD
Peter I. Yi, MD

Middlesex County
Brad J. Cohen, MD
Julie Ganifas, MD
James P. Lamprinakos, MD
Philip Mach, MD
Douglas M. Solonick, MD
Jack A. Stroh, MD

Monmouth County
Ellen M. Cosgrove, MD
John E. Fitzpatrick, MD
Mark I. Sisskin, MD
Christopher S. Tolerico, MD
Alfred F. Wolkomir, MD

Morris County
Eve S. Benvenuti, MD
Ian J. Gluck, MD
John C. Hahn, MD
Veronique C. Hubert, MD
Marta Meyers, MD
Deborah Pasik, MD
Arthur F. Santiago, MD
Scott N. Schafrank, MD
Neal D. Shore, MD
Stanley J. Skoczylas, MD
Mark H. Stein, MD

Ocean County
Stephanie P. Argyris, MD
Alison F. Carter, MD
Rosalinda O. Espineli, MD
Daniel E. Fox, MD
Howard D. Geller, MD
S. Moosa Jaffari, MD
Vasant P. Kate, MD
Brian S. Kerr, MD
Charles R. Markowitz, MD
Chakrapani T. Prakash, MD
William D. Strazzella, DO
Kock-Yen Tsang, MD
Neal J. Winzelberg, MD

Passaic County
Scott L. Coleman, MD
Ayad K. Jihayel, MD

Somerset County
Joseph A. Donnellan, MD
Ronald G. Nahass, MD

Union County
Alan P. Krieger, MD

PLACEMENT FILE

The following physicians have written to the executive offices of MSNJ seeking information on possible opportunities for practice in New Jersey. The information has been supplied by the physicians. If you are interested in any further information concerning these physicians, we suggest you make inquiries directly to them.

ANESTHESIOLOGY

Michael Silverberg, MD, 2020 Walnut St., Apt. 29K, Philadelphia, PA 19103. Yale 1983. Board eligible. Group or hospital. Available July 1991.

CARDIOLOGY

George D. Birmingham, MD, 3531 Salerno Ct., Apt. 5, Middleton, WI 53562. Mount Sinai 1984. Board eligible. Board certified (IM). Group or partnership. Available July 1991.

INTERNAL MEDICINE

Anan Adnan Faidi, MD, 30 Charles St. W, Apt. 1717, Toronto, Ontario, IM4Y 1R5 Canada. Jordan 1983. Board certified. Also, board eligible (ENDOCRIN). Group. Available.

Marc Kesselhaut, MD, 1 Rustic Ridge, C16, Little Falls, NJ 07424. St. George's University 1986. Board eligible. Solo or partnership in Mercer, Somerset, Burlington, Hunterdon, or Middlesex County. Available.

Suresh Reddy, MD, 3301 Cobblestone Cir., #6, Waterloo, IA 50703. Kakatiya (India) 1980. Board certified. Board eligible (GASTRO). Group, partnership, solo. Available.

NUCLEAR MEDICINE

Haresh P. Solanki, MD, 3 West Elm St., Islip, NY 11751. MP Shah Medical College (Iran) 1980. Board eligible. Group or hospital based. Available.

PEDIATRICS

Donna Churlin, MD, 55 Montgomery St., Bloomfield, NJ 07003. UMDNJ 1987. Board eligible. Partnership or group in central New Jersey (Essex, Union, or Morris Counties). Available July 1991.

PHYSICAL MEDICINE AND REHABILITATION

Robert B. Thorne, MD, 112 Woodside Ave., Trenton, NJ 08618. Rutgers 1980. Board certified. Part time or full time. Available.

SURGERY

Donna Vecchione, MD, 27700 Bishop Park Dr., 4025, Willoughby Hills, OH 44092. SUNY-Stony Brook 1985. Board eligible. Partnership, solo, multispecialty group. Available.

UROLOGY

Ronald G. Frank, MD, 380 Rector Pl., Apt. 11J, New York, NY 10280. New York Medical 1985. Group or partnership. Available July 1991.

Jeffrey L. Gevirtz, MD, 400 Narragansett Pkwy., Apt. SC7, Warwick, RI 02888. UMDNJ-Robert Wood Johnson Medical School 1986. Board eligible. Group or partnership. Available July 1991.

S. Misra, MD, 8161 Gatewood Dr., Clay, NY 10341. SCB-Orissa (India) 1977. Board eligible. Group or partnership. Available July 1991.

CONTINUING EDUCATION

ANESTHESIOLOGY

January

15 **Meeting**
6-9 P.M.—Ramada Inn, Clark
(New Jersey State Society of Anesthesiologists)

17 **Geriatric Anesthesia**
8-9 A.M.—Dover General Hospital, Dover
(AMNJ)

February

1-3 **Advances in Pain Management**
Yacht and Beach Club, Walt Disney World, Lake Buena Vista, Florida
(UMDNJ)

DERMATOLOGY

January

8 **Nail Disease**
7-9 P.M.—Schering Corporation, Kenilworth
(Dermatological Society of New Jersey)

16 **Case Presentations**
6-9 P.M—RCHP, US #1, New Brunswick
(UMDNJ, Division of Dermatology)

February

12 **Liposuction**
7-9 P.M.—Schering Corporation, Kenilworth
(Dermatological Society of New Jersey)

13 **Common Dermatoses**
1:30-2:30 P.M.—Runnells Specialized Hospital, Berkeley Heights
(AMNJ)

INFECTIOUS DISEASE

January

9 **Diagnosis and Treatment of AIDS**
10:30-11:30 A.M.—Christ Hospital, Jersey City
(AMNJ and NJDOH)

9 **Diagnosis and Treatment of AIDS**
11:30 A.M.-12:30 P.M.—Rahway Hospital, Rahway
(AMNJ and NJDOH)

9 **Diagnosis and Treatment of AIDS**
12 Noon-1 P.M.—Warren Hospital, Phillipsburg
(AMNJ and NJDOH)

11 **Identification and Management of Asymptomatic HIV-Infection**
10-11 A.M.—Marlboro Psychiatric Hospital, Marlboro
(AMNJ and NJDOH)

23 **Diagnosis and Treatment of AIDS**
12 Noon-1 P.M.—Union Hospital, Union
(AMNJ and NJDOH)

30 **Identification and Management of Asymptomatic HIV-Infection**
12 Noon-1 P.M.—Union Hospital, Union
(AMNJ and NJDOH)

February

13 **Diagnosis and Treatment of AIDS**
9-10 A.M.—Elizabeth General Medical Center, Elizabeth
(AMNJ and NJDOH)

MEDICINE

January

2 **Hyperalimentation**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

8, 15, 22, 29 **Internal Medicine Update and Board Review**
5:30-7:30 P.M.—Cooper Hospital/University Medical Center, Camden
(Cooper Hospital/University Medical Center)

8, 16 **Topics in Public Health**
12:15-1:30 P.M.—Health and Agriculture Building, Auditorium, Trenton
(NJDOH and AMNJ)

9 **Diabetic Retinopathy**
1:30-2:30 P.M.—Roosevelt Hospital, Edison
(AMNJ)

9 **Diabetic Nephropathy**
2-3 P.M.—Welkind Rehabilitation Hospital, Chester
(AMNJ)

9 **Living Wills**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

9 **Hypertension—New Drug Regimens**
2:30-3:30 P.M.—Ancora Psychiatric Hospital, Hammonton
(AMNJ)

10-11 **Sinus Endoscopy**
7:30 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

14 **Diabetic Nephropathy**
1-2 P.M.—New Lisbon Developmental Center, New Lisbon
(AMNJ)

15 **Beyond Correction of Anemia—Erythropoietin in the ESRD Patient**
6:30-9:30 P.M.—Overlook Hospital, Summit
(Nephrology Society of New Jersey)

15 **Asbestos-Associated Diseases**
8-9 A.M.—Underwood Memorial Hospital, Woodbury
(AMNJ)

16 **Diabetic Nephropathy**
1:30-2:30 P.M.—Essex County Hospital Center, Cedar Grove
(AMNJ)

16, 23, 30 **Internal Medicine Review Course**
4-7 P.M.—University Hospital, New Brunswick
(AMNJ and UMDNJ)

16 **Current Chemotherapy**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

17 **New Treatment Modalities and Implications for the Future in Diabetes**
10-11 A.M.—Hunterdon Developmental Center, Clinton
(AMNJ)

18 **Juvenile Onset Diabetes**
8-9 A.M.—Dover General

PHILADELPHIA HEART INSTITUTE

Presbyterian Medical Center

Cardiology Update

designed for the physician and provides an intensive survey of the current status of clinical cardiology . . .

Wednesday, January 9, 1991

Stroke: Diagnosis and Management in the 1990's

Moderator: Ami E. Iskandrian, M.D.

3:00-3:30	The natural history of chronic atrial fibrillation and the prevention of strokes	*J. David Ogilby, M.D.*
3:30-4:00	Diagnosis and management of symptomatic and asymptomatic carotid bruits in patients undergoing cardiac surgery	*William G. Hendren, M.D.*
4:00-5:00	Case Presentations	*Vasanth K. Bethala, M.D.*
	Panel Discussion *Robert I. Katz, M.D.* *Terry Langer, M.D.* *Stephen J. Nierenberg, M.D.*	*J. David Ogilby, M.D.* *Gary J. Vigilante, M.D.*

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**Presbyterian Medical Center designates this continued medical education activity for 2 credit hours in Category I of the Physicians' Recognition Award of the American Medical Association and the Pennsylvania Medical Society Membership requirement. Nine sessions, 19 credits.*

Hospital, Dover
(AMNJ)

23 **Peptic Ulcer Disease**
2:30-3:30 P.M.—Trenton
Psychiatric Hospital, Trenton
(AMNJ)

24 **Visiting Professor Lecture**
1:30-5 P.M.—Saint Barnabas
Medical Center, Livingston
(Saint Barnabas Medical Center)

25 **Detoxification: Commonly Used Drugs**
10-11 A.M.—Marlboro Psychiatric
Hospital, Marlboro
(AMNJ)

30 **Chronic Epstein-Barr Virus**
10:30-11:30 A.M.—Christ
Hospital, Jersey City
(AMNJ)

February

1 **Living Wills**
12 Noon-1 P.M.—South Jersey
Hospital System, Bridgeton
(AMNJ)

2 **Podiatry Meeting**
8 A.M.-4 P.M.—New Jersey
Medical School, Newark
(UMDNJ)

2- **8th Annual Pain Management**
5 8 A.M.-1 P.M.—Walt Disney
World, Lake Buena Vista, Florida
(UMDNJ)

5 **Fifth Annual Internal Medicine**
12 **Update and Board Review**
19 5:30-7:30 P.M.—Cooper Hospital/
26 University Medical Center,
Camden
(Cooper Hospital/University Medical Center)

5 **Issues in Public Health**
19 12:15-1:30 P.M.—Health and
Agriculture Building, Auditorium,
Trenton
(NJDOH and AMNJ)

6 **Living Wills**
10:30-11:30 A.M.—Christ
Hospital, Jersey City
(AMNJ)

6 **Internal Medicine Review**
13 **Course**
20 4-7 P.M.—University Hospital,
27 New Brunswick
(AMNJ and UMDNJ)

6 **Diabetes in Pregnancy**
11:30 A.M.-12:30 P.M.—Rahway
Hospital, Rahway
(AMNJ)

6 **Nonoperative Management of Chronic Back Pain**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

8 **Diabetic Nephropathy**
1-2 P.M.—North Princeton
Developmental Center, Princeton
(AMNJ)

11 **DRG/Cost Containment**
7-8 P.M.—Wallkill Valley General
Hospital, Sussex
(AMNJ)

12 **Internal Medicine Update and**
19 **Board Review**
26 5:30-7:30 P.M.—Cooper Hospital/
University Medical Center,
Camden
(Cooper Hospital/University Medical Center)

13 **Learning Disabilities**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

13 **Chronic Epstein-Barr Virus**
1:30-2:30 P.M.—Essex County
Hospital Center, Cedar Grove
(AMNJ)

15 **Neuro-Ophthalmology**
12 Noon-1 P.M.—South Jersey
Hospital System, Bridgeton
(AMNJ)

20 **Managing Stress Effectively**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

21 **Prevention of Lower Extremity Amputations**
1:30-2:30 P.M.—Essex County
Hospital Center, Cedar Grove
(AMNJ)

28 **Visiting Professor Lecture**
1:30-5 P.M.—Saint Barnabas
Medical Center, Livingston
(Saint Barnabas Medical Center)

OBSTETRICS/GYNECOLOGY

January

9 **Estrogen Replacement Therapy**
10:30-11:30 A.M.—St. Mary's
Hospital, Passaic
(AMNJ)

11 **Postoperative Toxic Shock Syndrome**
12 Noon-1 P.M.—South Jersey
Hospital System, Bridgeton
(AMNJ)

14 **Adolescent Menstrual Disorders**
12 Noon-1 P.M.—Warren
Hospital, Phillipsburg
(AMNJ)

18- **4th Annual Practice Approaches**
21 **to Obstetrics and Gynecology**
7:30 A.M.-1 P.M.—Cozamel,
Mexico
(UMDNJ)

25 **Diabetes in Pregnancy**
7:30-8:30 A.M.—Kennedy
Memorial Hospital,
Washington Township
(AMNJ)

February

17- **Current Issues and Advances in**
20 **Women's Health Care**
7:30 A.M.-1 P.M.—Walt Disney
World, Lake Buena Vista, Florida
(UMDNJ)

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Hahnemann University

Department of Medicine

GRAND ROUNDS
WEDNESDAYS

8:30 a.m.-9:30 a.m.

December, 1990

December 5, 1990
PTCA VS BYPASS GRAFT SURGERY FOR CORONARY ARTERY DISEASE
William S. Frankl, MD
Vischer Professor of Medicine and Chairman, Department of Medicine
Director, Likoff Cardiovascular Institute
Hahnemann University

December 12, 1990
ABNORMALITIES OF THROMBOSIS AND THROMBOEMBOLISM
Daniel Deykin, MD
Chief of Medicine, Director, Health Services Research and Development
Boston VA Medical Center, MA

December 19, 1990
DIVISION OF PULMONARY MEDICINE AND CRITICAL CARE
Edward Schulman, MD
Associate Professor of Medicine
Director, Division of Pulmonary and Critical Care Medicine
Hahnemann Universtiy

WEDNESDAY MEDICAL SEMINAR SERIES

8:30 a.m.-3:30 p.m.

December 12, 1990
ABNORMALITIES OF THROMBOSIS AND THROMBOEMBOLISM

Seminar Directors:

William S. Frankl, MD
Professor of Medicine and Chairman
Department of Medicine

Allan B. Schwartz, MD
Professor of Medicine
Director, Continuing Medical Education for the Department of Medicine

Location:
Classroom C (Alumni Hall)
2nd Fl. New College Bldg.
Hahnemann University
15th Street Entrance
15th & Vine Streets
Philadelphia, PA

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25-28 **4th Annual Obstetrics/ Gynecology Update**
Stowe, Vermont
(UMDNJ)

28 **Nurse Midwifery Program**
9 A.M.-5 P.M.—Bally's Park Place Casino, Atlantic City
(UMDNJ)

ONCOLOGY

January

11 **Tumor Board**
11 A.M.-12 Noon—Wallkill Valley Hospital, Sussex
(AMNJ)

16 **Current Chemotherapy**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

16 **Reception**
6:30-9:30 P.M.—The Manor, West Orange
(Radiation Oncology Section, AMNJ)

24 **Tumor Board Conference**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(AMNJ)

February

8 **Tumor Board**
11 A.M.-12 Noon—Wallkill Valley Hospital, Sussex
(AMNJ)

28 **Dinner Meeting**
6:30-9:30 P.M.—The Manor, West Orange
(Head and Neck Oncology Section, AMNJ)

28 **Tumor Board**
12 Noon-1 P.M.—Newcomb Medical Center, Vineland
(AMNJ)

ORTHOPEDICS

February

6 **Nonoperative Management of Chronic Back Pain**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

PEDIATRICS

February

28 **Update in Aspects of Pediatrics**
6-10 P.M.—Marriott Hotel, Saddle Brook
(Northern New Jersey Pediatric Society)

PSYCHIATRY

January

22 **Patient Care Monitoring**
1:30-3:30 P.M.—Trenton Psychiatric Hospital, Trenton
(AMNJ)

25 **Detoxification: Commonly Used Drugs**
10-11 A.M.—Marlboro Psychiatric Hospital, Marlboro
(AMNJ)

February

20 **Managing Stress Effectively**
10:30-11:30 A.M.—St. Mary's Hospital, Passaic
(AMNJ)

26 **Patient Care Monitoring**
1:30-3:30 P.M.—Trenton Psychiatric Hospital, Trenton
(AMNJ)

RADIOLOGY

January

17 **Radiology Meeting**
Saint Barnabas Medical Center, Livingston
(Radiology Society of New Jersey/AMNJ)

February

21 **Radiology Meeting**
Saint Barnabas Medical Center, Livingston
(Radiology Society of New Jersey/AMNJ)

SURGERY AND ITS SPECIALTIES

January

7 **Surgical Procedures for Chronic Pancreatitis**
11 A.M.-1 P.M.—East Orange General Hospital, East Orange
(AMNJ)

10-11 **Sinus Endoscopy**
7:30 A.M.-4 P.M.—New Jersey Medical School, Newark
(UMDNJ)

11 **Postoperative Toxic Shock Syndrome**
12 Noon-1 P.M.—South Jersey Hospital System, Bridgeton
(AMNJ)

February

10-12 **12th Annual Vascular Symposium**
8 A.M.-4:30 P.M.—Taj Mahal Hotel & Casino, Atlantic City
(UMDNJ)

UROLOGY

January

8 **Winter Meeting**
Holiday Inn, Jamesburg
(Urology Society of New Jersey)

SPECIAL ISSUE

Medical Research in New Jersey
November 1990

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IN MEMORIAM

Royal E. Durham. At the grand age of 96, Royal Elwood Durham, MD, died on August 30, 1990. Dr. Durham was a recipient of the Medical Society of New Jersey Golden Merit Award in 1965, for 50 years of medical service to his community. Born in Baltimore, Maryland, Dr. Durham earned his medical degree from Jefferson Medical College, Pennsylvania, in 1915. After completing an internship at the Episcopal Hospital, Philadelphia, he served in the United States Army during World War I, serving in France and at the base hospital on the front treating soldiers with "shell shock." Upon his return, he opened a general medical practice in Atlantic City from 1919 until his retirement in 1966, and served on the staffs of Atlantic City Medical Center, and Shore Memorial Hospital. During his lengthy career, Dr. Durham was a member of our Atlantic County component and of the AMA.

Basil J. Ellmers. A member of our Bergen County component, Basil James Ellmers, MD, died on June 27, 1990, at the age of 84. Dr. Ellmers was born in San Pedro, St. Domingo, on October 3, 1905. Dr. Ellmers earned his medical degree from Tufts University School of Medicine, Boston, in 1931, interned at Hackensack Medical Center, served a residency at the former Bergen County Hospital, and received his New Jersey medical license in 1933. A general practitioner, Dr. Ellmers practiced in New Milford and Oradell and was affiliated with Hackensack Medical Center and with the former Bergen County Hospital. He served as staff president for both hospitals. Dr. Ellmers was a health officer in the early 1940s and an AMA member.

Arthur W. Faust, Jr. Word has been received of the death of Arthur William Faust, Jr., MD, on August 22, 1989. Born in 1918, Dr. Faust attended Temple University School of Medicine, earning his medical degree in 1944. Dr. Faust served a residency in internal medicine at the Hospital of Saint Raphael, New Haven, Connecticut. Dr. Faust pursued a postgraduate course in internal medicine at the University of Pennsylvania Postgraduate School of Medicine. An internist and cardiologist, Dr. Faust was affiliated with Monmouth Medical Center, Long Branch, and was a clinical instructor of internal medicine at Hahnemann Medical College, Philadelphia.

Elmer L. Grimes. Founder of the Medical Inter-Insurance Exchange of New Jersey, one of the first physician-owned medical insurance groups in the United States, Elmer L. Grimes died on September 20, 1990, of a brain tumor at the age of 76. Born in Massachusetts on August 25, 1914, Dr. Grimes earned his medical degree from Tufts University School of Medicine, Boston, Massachusetts, in 1940. After completing an internship and residency at the former Philadelphia General Hospital, he served a fellowship at Sloan Kettering Cancer Institute, New York. From 1943 to 1946, Dr. Grimes served as a lieutenant in the United States Navy Scabees in the South Pacific. In 1950, Dr. Grimes received his New Jersey medical license and became affiliated with two Camden facilities: Our Lady of Lourdes Medical Center, and Cooper Hospital/University Medical Center. During his career as a surgeon and medical insurance executive, Dr. Grimes served as hospital chief of surgery from 1972 to 1982; member and president of the Camden County Medical Society; diplomate of the American Board of Surgery; professor of medicine at both University of Pennsylvania School of Medicine and Jefferson Hospital Medical College, Philadelphia; governor of the New Jersey chapter of the American College of Surgeons; fellow in the Philadelphia Academy of Surgery; and member of the AMA.

Thomas C. Hooton. Retired surgeon and member of our Essex County component, Thomas Campbell Hooton, MD, died on August 15, 1990, at his home in San Mateo, California, at the age of 87. Born in Pensacola, Florida, in 1902, Dr. Hooton was graduated from Columbia University College of Physicians and Surgeons, New York, in 1932, and then completed a residency at Bellevue Medical School, New York. After receiving his New Jersey medical license in 1935, Dr. Hooton opened a private surgical practice in Montclair in 1936; for over 50 years he was affiliated with The Mountainside Hospital, Montclair; Saint Barnabus Medical Center, Livingston; and Montclair Community Hospital. During his career, Dr. Hooton was chief of staff of Montclair Community Hospital, fellow of the Society of Abdominal Surgeons, and diplomate of the American Board of Abdominal Surgery.

Samuel J. Mazzotta. Family practitioner Samuel John Mazzotta, MD, died on June 9, 1990, at the age of 77. Dr. Mazzotta was born in Philadelphia on May 11, 1913. After receiving his medical degree from the State University of New York, Syracuse, in 1938, Dr. Mazzotta interned at University Hospital-SUNY, Syracuse Health Sciences Center. Dr. Mazzotta maintained a private practice in Wildwood Crest and was affiliated with Burdette Tomlin Memorial Hospital, Cape May Court House. Dr. Mazzotta served on the Wildwood Crest Board of Health. Dr. Mazzotta was a captain in the United States Army from 1940 to 1946, stationed at hospitals in Fort Dix, New Guinea, and the Philippine Islands and was awarded six medals and two battle stars for his service. Dr. Mazzotta was a member of the American Medical Association and of our Cape May County component, serving as secretary from 1955-1957. Dr. Mazzotta was past-president of the Cape May County Health Clinic.

James P. Pregnall. At the age of 83, orthopedic surgeon James Percy Pregnall, MD, died on January 11, 1990. Dr. Pregnall, born in Monroe, South Carolina, on April 23, 1906, lived in Richmond, Virginia, before moving to Allenhurst in 1936. Dr. Pregnall earned his medical degree from the Medical College of Virginia, in 1929. After serving an internship at New Haven General Hospital, Connecticut, and residencies at Holy Name Hospital, Teaneck, and New Haven General Hospital, Dr. Pregnall received his New Jersey medical license in 1931. Dr. Pregnall maintained a practice in Asbury Park and was affiliated with the former Fitkin Memorial Hospital, Neptune; Monmouth Memorial Hospital, Long Branch; and Jersey Shore Medical Center, Neptune. Dr. Pregnall retired in 1969. From 1946 to 1947, Dr. Pregnall served as president of our Monmouth County component. He was a member of the American Medical Association.

Saul J. Shapiro. Born on January 22, 1910, in New York City, Saul Joseph Shapiro, MD, died January 21, 1990, at the age of 79. After earning his medical degree from Eclectic Medical College, Cincinnati, Ohio, in 1935, Dr. Shapiro interned at Jersey City Medical Center and earned his New Jersey medical license in 1936. Dr. Shapiro maintained a practice in Union City and Atlantic Highlands and was affiliated with Monmouth Medical Center, Long Branch. In addition, Dr. Shapiro, involved in medical administration, was a health officer for the boroughs of Atlantic Highlands and Highlands and a physician for the United States Public Health Service. Dr. Shapiro was a captain in the United States Army from 1942 to 1946. Dr. Shapiro was a member of the American Medical Association, and of our Monmouth County component.

Kenneth H. Soll. At the untimely age of 59, Cherry Hill resident Kenneth Harvey Soll, MD, died July 17, 1990. Born in Chester, Pennsylvania, on July 26, 1930, Dr. Soll earned his medical degree from Jefferson Medical College, Philadelphia, in 1956. Dr. Soll interned at Thomas Jefferson University Hospital and served a fellowship in radiology at Temple University School of Medicine, Philadelphia. Dr. Soll received medical licenses from several states: Pennsylvania in 1957, Florida in 1969, New Jersey in 1972, New York in 1976, and Rhode Island in 1979. A radiologist, Dr. Soll maintained a practice in Moorestown and in Rhode Island. Dr. Soll was a member of our Burlington County component, of our Camden County component, of the Rhode Island Medical Society, and of the Radiological Society of North America. He was a fellow of the American College of Radiology.

Herbert A. St. John. Board-certified internist Herbert Andrew St. John, MD, died on June 29, 1990, at the age of 71. Born in Rio Piedras, Puerto Rico, on January 4, 1919, Dr. St. John earned his medical degree from the University of Rochester School of Medicine and Dentistry, New York, in 1945 and his New Jersey medical license in 1950. Dr. St. John had a private practice in Old Tappan and was affiliated with Pascack Valley Hospital, Westwood, and Englewood Hospital. Dr. St. John was a member of our Bergen County component and of the American Medical Association. Dr. St. John served as captain in the United States Army Medical Corps from 1946 to 1948.

Pauline Swarm. Public health pediatrician Pauline Kirksey Alexander Swarm, MD, died on August 19, 1990, at the age of 63. Born on October 11, 1926, in Fort Smith, Arkansas, Dr. Swarm received her medical degree from Washington University School of Medicine, St. Louis, Missouri, in 1951, and her Missouri, Maryland, Ohio, and New Jersey medical licenses in 1951, 1955, 1965, and 1968, respectively. Dr. Swarm served her internship and her residency, both in pediatrics, at St. Louis Children's Hospital, St. Louis. Dr. Swarm served a clinical fellowship at St. Louis Children's Hospital and at Washington University School of Medicine. A public health pediatrics physician for various boards of health, Dr. Swarm also maintained a practice in Ridgewood. Dr. Swarm was a professor of pediatrics at the University of Cincinnati College of Medicine, Ohio and a member of our Bergen County component.

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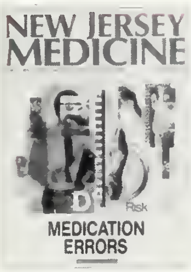

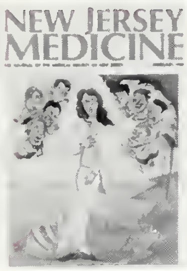

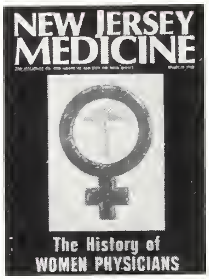

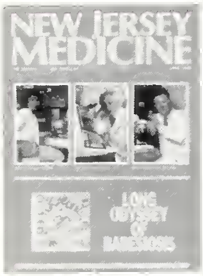

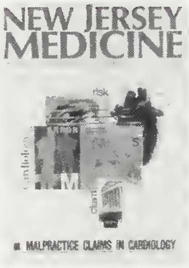

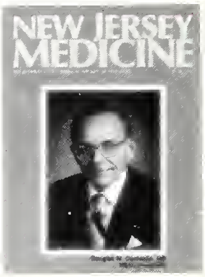

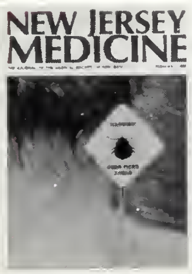

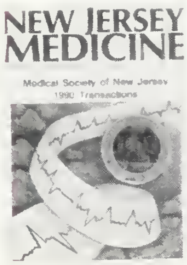

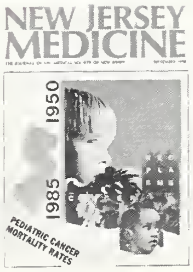

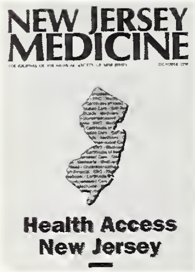

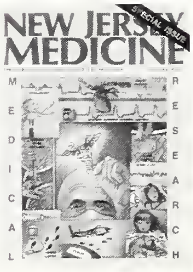

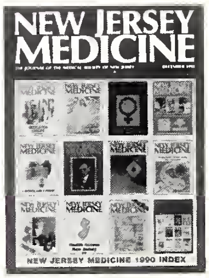

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